

10/510,035

PENG 10/510035 08/10/2006 Page 1

=> FILE REG

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=> FILE HCAPL

FILE 'HCAPLUS' ENTERED AT 13:53:35 ON 10 AUG 2006
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FILE COVERS 1907 - 10 Aug 2006 VOL 145 ISS 7
FILE LAST UPDATED: 9 Aug 2006 (20060809/ED)

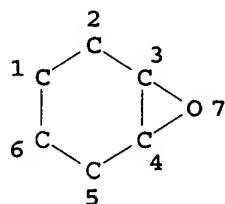
New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
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=> D QUE

L3 STR

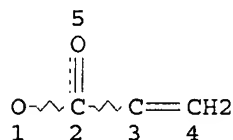
Structure 1



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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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 NUMBER OF NODES IS 7

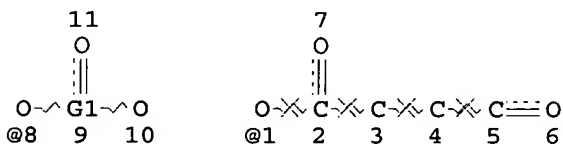
STEREO ATTRIBUTES: NONE
 L5 STR 2



NODE ATTRIBUTES:
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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE
 L7 SCR 2043
 L9 2440 SEA FILE=REGISTRY SSS FUL L3 AND L5 AND L7
 L10 274381 SEA FILE=REGISTRY ABB=ON POLYETHER/PCT
 L11 859 SEA FILE=REGISTRY ABB=ON L9 AND L10
 L16 STR



*851 polyethers
 from query
 structures 1 and 2*

*Subset search for
 acids
 209 polyethers*

G2 12

VAR G1=S/P
 VAR G2=1/8

NODE ATTRIBUTES:
 NSPEC IS RC AT 1
 NSPEC IS RC AT 2
 NSPEC IS RC AT 3

NSPEC IS RC AT 4
 NSPEC IS RC AT 5
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L18 467 SEA FILE=REGISTRY SUB=L9 SSS FUL L16
 L19 209 SEA FILE=REGISTRY ABB=ON L18 AND L10
 L20 93 SEA FILE=HCAPLUS ABB=ON L19
 L22 75 SEA FILE=HCAPLUS ABB=ON L20 (L) PREP/RL
 L23 482 SEA FILE=HCAPLUS ABB=ON L11
 L24 365 SEA FILE=HCAPLUS ABB=ON L23 (L) PREP/RL
 L25 60 SEA FILE=HCAPLUS ABB=ON L24 AND ANHYDRIDE
 L26 89 SEA FILE=HCAPLUS ABB=ON L22 OR L25
 L27 8 SEA FILE=HCAPLUS ABB=ON L26 AND POLYETHERS/IT
 L28 8 SEA FILE=HCAPLUS ABB=ON L26 AND POLYETHER#
 L29 62 SEA FILE=HCAPLUS ABB=ON L24 AND ANHYDRIDE?
 L30 90 SEA FILE=HCAPLUS ABB=ON L22 OR L29
 L33 55 SEA FILE=HCAPLUS ABB=ON L30 AND (POLYMER? OR PLASTIC?)/SC,SX
 L35 59 SEA FILE=HCAPLUS ABB=ON L27 OR L28 OR L33
 L38 8 SEA FILE=HCAPLUS ABB=ON L30 AND POLYETHER?
 L39 59 SEA FILE=HCAPLUS ABB=ON L35 OR L38

59 CA references limited to preparations

=> D L39 BIB ABS HITIND HITSTR

L39 ANSWER 1 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2006:485583 HCAPLUS
 DN 144:489843
 TI Curable acrylic resin compositions, their optical components, and
 manufacture of the optical components
 IN Tomiyama, Takeo; Yoshida, Akihiro; Kobayashi, Shingo; Kawai, Hiromasa
 PA Hitachi Chemical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN-CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006131867	A2	20060525	JP 2005-8176	20050114
PRAI	JP 2004-296071	A	20041008		

AB The comps. which are liquid at 25° and are cured by heat or light
 irradiation contain (A) epoxy group-containing (meth)acrylates, (B)
 (meth)acrylates, (C) epoxy group-containing acrylic copolymers, (D) acid
anhydrides as epoxy hardeners, optionally, (E) radical polymerization
 initiators and (F) epoxy curing accelerators. The optical components are
 manufactured by photoinduced radical polymerization of A with B, followed by
 thermal
 ionic polymerization of A with C and D. Thus, a liquid composition comprising
 Light
 Ester G (glycidyl methacrylate; I) 31, Me methacrylate (II) 8, 1:1 I-II
 copolymer 15, HN 5500 (methylhexahydrophthalic **anhydride**) 46,
 AIBN 0.2, tetrabutylphosphonium diethylphosphodithionate (Hishicolin PX
 4ET) 1 part was cast in glass molds and heated at 80, 100, 125, and
 150° for 1 h to give 3-mm or 1-mm thick cured test pieces showing

curing shrinkage 9.0%, Tg 166°, high flexural modulus at room temperature and at 25°, and transparency 91% initially and 75% after 72 h at 150°.

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 73

IT Crosslinking agents

(for epoxy, acid anhydrides; heat- and light-curable liquid compns. containing acrylic monomers and acrylic polymers for heat-resistant transparent optical components)

IT Anhydrides

RL: TEM (Technical or engineered material use); USES (Uses)
(hardener; heat- and light-curable liquid compns. containing acrylic monomers

and acrylic polymers for heat-resistant transparent optical components)

IT 502422-66-4P, HN 5500-Light Ester G-methyl methacrylate copolymer

887269-41-2P, HN 5500-Light Acrylate 1.9ND-A-Light Ester G-methyl methacrylate copolymer 887269-43-4P, Cyclomer M 100-glycidyl methacrylate-HN 5500-methyl methacrylate copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinked; heat- and light-curable liquid compns. containing acrylic monomers and acrylic polymers for heat-resistant transparent optical components)

IT 887269-43-4P, Cyclomer M 100-glycidyl methacrylate-HN 5500-methyl methacrylate copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinked; heat- and light-curable liquid compns. containing acrylic monomers and acrylic polymers for heat-resistant transparent optical components)

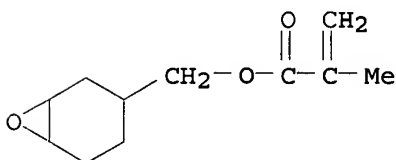
RN 887269-43-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with hexahydromethyl-1,3-isobenzofurandione, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

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CRN 82428-30-6

CMF C11 H16 O3

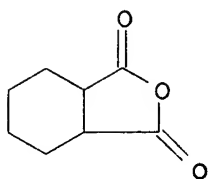


CM 2

CRN 25550-51-0

CMF C9 H12 O3

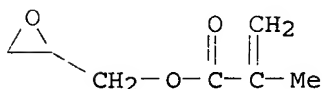
CCI IDS



D1-Me

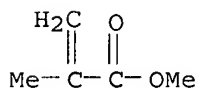
CM 3

CRN 106-91-2
CMF C7 H10 O3



CM 4

CRN 80-62-6
CMF C5 H8 O2



=> D L39 BIB ABS HITIND HITSTR 2-59

L39 ANSWER 2<OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2006:446200 HCAPLUS

DN 144:471420

TI Method of fabrication of reactive polymer-supported porous film for battery separator

IN Uetani, Yoshihiro; Kii, Keisuke; Ichikawa, Tomoaki; Satsuma, Michio; Nishikawa, Satoshi; Bessho, Shinji

PA Nitto Denko Corporation, Japan

SO U.S. Pat. Appl. Publ., 16 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2006099497	A1	20060511	US 2005-267404	20051107
	JP 2006131808	A2	20060525	JP 2004-324258	20041108
	EP 1657766	A1	20060517	EP 2005-24233	20051107

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK,
BA, HR, IS, YU

CN 1783543 A 20060607 CN 2005-10120323 20051108

PRAI JP 2004-324258 A 20041108

AB A reactive polymer-supported porous film for separator, that has sufficient adhesiveness between electrodes and separator and can suitably be used to produce a battery having low internal resistance and high rate performance, a method for producing the porous film, a method for producing a battery using the porous film, and an electrode/porous film assembly are disclosed. The reactive polymer-supported porous film for battery separator includes a porous film substrate having supported thereon a reactive polymer obtained by reacting a crosslinkable polymer having at least one reactive group selected from the group consisting of 3-oxetanyl group and epoxy group in the mol., with an acid anhydride, thereby partially crosslinking the polymer.

INCL 429144000; 204471000; 210321600; 029623500

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
Section cross-reference(s): 38

IT 886209-80-9P 886209-81-0P 886209-82-1P
886209-83-2P

RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(method of fabrication of reactive polymer-supported porous film for battery separator)

IT 330939-34-9P, 3,4-Epoxy cyclohexylmethyl acrylate/3-ethyl-3-oxetanylmethyl methacrylate/methyl methacrylate copolymer
422305-48-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(method of fabrication of reactive polymer-supported porous film for battery separator)

IT 886209-80-9P 886209-81-0P 886209-82-1P
886209-83-2P

RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(method of fabrication of reactive polymer-supported porous film for battery separator)

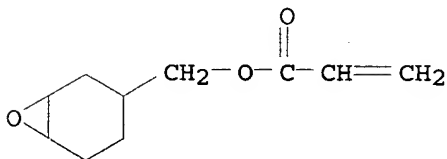
RN 886209-80-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (3-ethyl-3-oxetanyl)methyl ester, polymer with butyl 2-propenoate, dihydro-2,5-furandione, methyl 2-methyl-2-propenoate and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

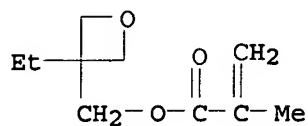
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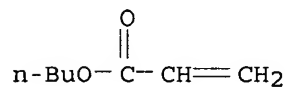
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CRN 37674-57-0
CMF C10 H16 O3



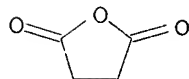
CM 3

CRN 141-32-2
CMF C7 H12 O2



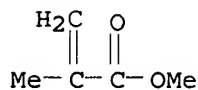
CM 4

CRN 108-30-5
CMF C4 H4 O3



CM 5

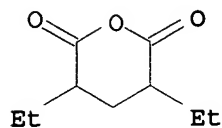
CRN 80-62-6
CMF C5 H8 O2



RN 886209-81-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (3-ethyl-3-oxetanyl)methyl ester, polymer with butyl 2-propenoate, 3,5-diethyldihydro-2H-pyran-2,6(3H)-dione, methyl 2-methyl-2-propenoate and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

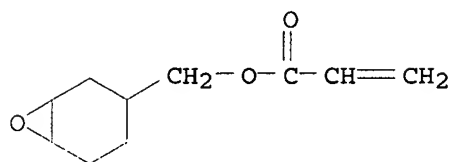
CRN 100144-91-0
CMF C9 H14 O3



CM 2

CRN 64630-63-3

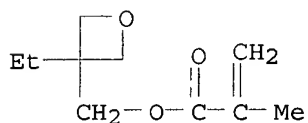
CMF C10 H14 O3



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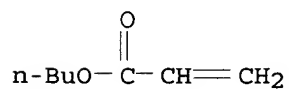
CMF C10 H16 O3



CM 4

CRN 141-32-2

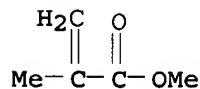
CMF C7 H12 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2

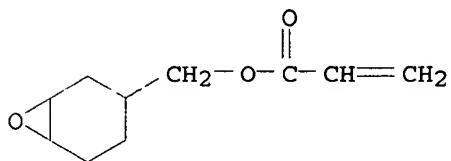


RN 886209-82-1 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, (3-ethyl-3-oxetanyl)methyl ester, polymer
 with butyl 2-propenoate, 1,3-isobenzofurandione, methyl
 2-methyl-2-propenoate and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate
 (9CI) (CA INDEX NAME)

CM 1

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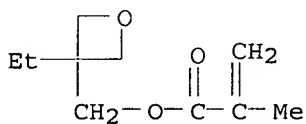
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CM 2

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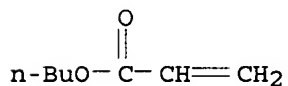
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CM 3

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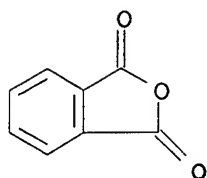
CMF C7 H12 O2



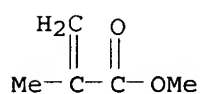
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CRN 85-44-9

CMF C8 H4 O3



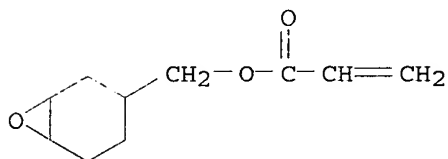
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CRN 80-62-6
CMF C5 H8 O2

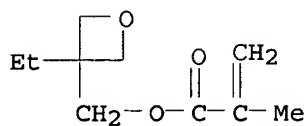
RN 886209-83-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (3-ethyl-3-oxetanyl)methyl ester, polymer
with 1,3-isobenzofurandione, methyl 2-methyl-2-propenoate and
7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

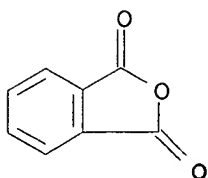
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CMF C10 H14 O3

CM 2

CRN 37674-57-0
CMF C10 H16 O3

CM 3

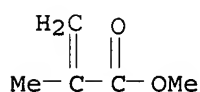
CRN 85-44-9
CMF C8 H4 O3



CM 4

CRN 80-62-6

CMF C5 H8 O2



IT 330939-34-9P, 3,4-Epoxyoctahydro-2H-chromene-2-carboxylic acid methyl ester/3-ethyl-3-oxetanylmethyl methacrylate/methyl methacrylate copolymer
422305-48-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP
(Preparation)

(method of fabrication of reactive polymer-supported porous film for battery separator)

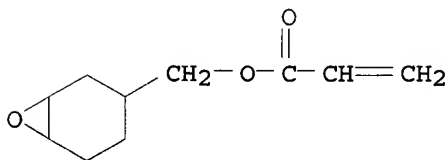
RN 330939-34-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (3-ethyl-3-oxetanyl)methyl ester, polymer with methyl 2-methyl-2-propenoate and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 64630-63-3

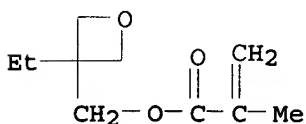
CMF C10 H14 O3



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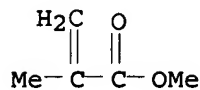
CRN 37674-57-0

CMF C10 H16 O3



CM 3

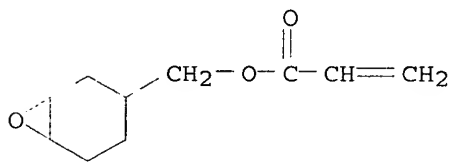
CRN 80-62-6
CMF C5 H8 O2



RN 422305-48-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (3-ethyl-3-oxetanyl)methyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate (9CI) (CA INDEX NAME)

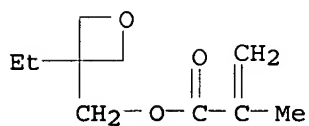
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CRN 64630-63-3
CMF C10 H14 O3



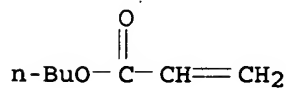
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CRN 37674-57-0
CMF C10 H16 O3



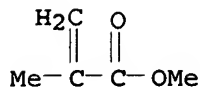
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



L39 ANSWER 3 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2006:269113 HCAPLUS

DN 144:313474

TI Reactive antistatic agents, their manufacture, polymer compositions containing them, and transparent, antiglare, or light diffusion films

IN Mori, Hideyuki

PA Sanyo Chemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 36 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006077217	A2	20060323	JP 2004-265941	20040913
PRAI	JP 2004-265941		20040913		

AB The reactive antistatic agents are manufactured by anion exchange of crosslinkable polymers, prepared from maleic anhydride copolymers and (meth)acrylate monomers $\text{H}_2\text{C}:\text{CR}_1\text{CO}_2(\text{R}_2)\text{mH}$ ($\text{R}_1 = \text{H}, \text{Me}$; $\text{R}_2 = \text{C}_2-4$ alkylene; $m = 1-30$), with amidinium salts guanidinium salts, and/or quaternary ammonium salts. Thus, a composition containing a reactive antistatic

agent prepared from SMA 1000 (styrene-maleic anhydride copolymer), 2-hydroxyethyl acrylate, and 1-ethyl-3-methylimidazolium Me carbonate, Light Acrylate PE 3A (pentaerythritol triacrylate), and Irgacure 184 (photopolymer. catalyst) was applied on a PET film, dried, and irradiated with UV to give an antistatic transparent film with total light transmittance 93%, haze 0.2%, and surface resistivity before and after washing $2 + 1010$ and $3 + 1010 \Omega$, resp.

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 37, 73

ST reactive antistatic agent polymer compn; transparent antiglare light diffusion film; styrene maleic anhydride polymer hydroxyethyl acrylate antistatic; ethylmethylimidazolium pentaerythritol acrylate polymer antistatic transparent film

IT 879545-56-9P 879545-57-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of reactive antistatic agents containing crosslinkable polymer salts for transparent, antiglare, or light diffusion films)

IT 879545-57-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of reactive antistatic agents containing crosslinkable polymer salts for transparent, antiglare, or light diffusion films)

RN 879545-57-0 HCAPLUS

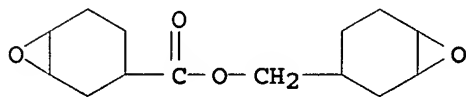
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, ethenylbenzene alternating polymer with 2,5-furandione 2-[(1-oxo-2-propenyl)oxy]ethyl ester ester with α -(2-methyl-1-oxo-2-

propenyl)- ω -hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 2386-87-0

CMF C14 H20 O4



CM 2

CRN 879545-54-7

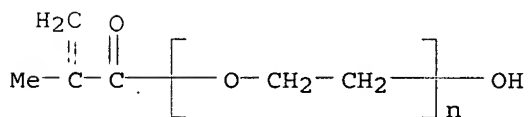
CMF (C8 H8 . C4 H2 O3)x . x C5 H8 O3 . x (C2 H4 O)n C4 H6 O2

CM 3

CRN 25736-86-1

CMF (C2 H4 O)n C4 H6 O2

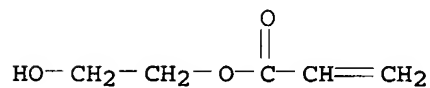
CCI PMS



CM 4

CRN 818-61-1

CMF C5 H8 O3



CM 5

CRN 106209-33-0

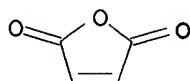
CMF (C8 H8 . C4 H2 O3)x

CCI PMS

CM 6

CRN 108-31-6

CMF C4 H2 O3



CM 7

CRN 100-42-5
CMF C8 H8

H₂C=CH-Ph

L39 ANSWER 4 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2006:74726 HCAPLUS

DN 144:151175

TI Thermosetting epoxy resin composition used as packaging material for optical device and their cured product

IN Sato, Atsushi

PA Daicel Chemical Industries, Ltd., Japan

SO PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006009115	A1	20060126	WO 2005-JP13168	20050715
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRAI JP 2004-216383 A 20040723

AB The composition comprises (A) a radical (co)polymer obtained by (co)polymerizing (a)

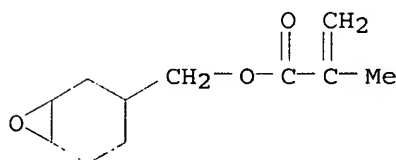
an ethylenically unsatd. monomer having ≥1 alicyclic epoxy group/mol. [e.g., (3,4-epoxycyclohexyl)methyl methacrylate (Cyclomer M 100)], and optionally (b) ethylenically unsatd. comonomer in the presence of a nonnitrile azo compound (e.g., di-Me 2,2'-azobisisobutyrate) as a polymerization initiator; (B) ≥1 curing agent selected from polybasic acid anhydrides and polybasic acids [e.g., hexahydrophthalic anhydride (Rikacid HH)]; and (C) a curing accelerator (e.g., tetrabutylammonium bromide). The packaging material for optical devices and cured product containing the thermosetting resin composition have high transparency and T_g, and good light resistance and crack resistance.

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 73

ST thermosetting epoxy packaging material optical device; hexahydrophthalic

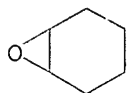
anhydride curing agent epoxy polyacrylate
 IT 128703-08-2P, Cyclomer M 100 homopolymer 301699-48-9P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); **PREP**
(Preparation); USES (Uses)
 (thermosetting epoxy resin composition used as packaging material for
 optical device and cured product)
 IT 128703-08-2P, Cyclomer M 100 homopolymer
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); **PREP**
(Preparation); USES (Uses)
 (thermosetting epoxy resin composition used as packaging material for
 optical device and cured product)
 RN 128703-08-2 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester,
 homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 82428-30-6
 CMF C11 H16 O3



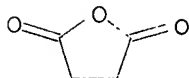
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 5 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2005:1284209 HCAPLUS
 DN 144:171399
 TI Synthesis of new polyesters with methacrylate pendant groups
 AU Bicak, Niyazi; Karagoz, Bunyamin
 CS Department of Chemistry, Istanbul Technical University, Maslak, Istanbul,
 34469, Turk.
 SO Polymer Bulletin (Heidelberg, Germany) (2006), 56(1), 87-93
 CODEN: POBUDR; ISSN: 0170-0839
 PB Springer
 DT Journal
 LA English
 AB A catalytic process for synthesis of new polyesters with methacrylate
 pendant groups is presented. Thus, zinc succinate catalyzed reaction of
 succinic **anhydride** with glycidyl methacrylate (GMA) in
 dimethoxyethane gives linear oligoesters with low mol. wts. (1380-2400
 Da). The polyester formation takes place via simultaneous ring opening of
 the cyclic **anhydride** and oxirane units. GMA component can be
 partially replaced with cyclohexene oxide to obtain polyesters with
 methacrylate pendant groups in various percentages. Nearly colorless waxy
 polymers are obtained in excellent yields (69-97%) within 48-60 h. at
 90°. In the study structure of the polymers have been elucidated
 by conventional spectroscopic techniques and photo-crosslinking of ability
 of their thin films have been tested by monitoring intensity of
 methacrylate double bonds, using IR-spectrometry methodol.
 CC 35-7 (Chemistry of Synthetic High Polymers)
 ST glycidyl methacrylate succinic **anhydride** cyclohexene oxide ring
 opening polymn; zinc succinate catalyst ring opening polymn polyester

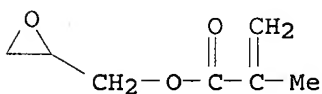
photocrosslinking
 IT 104696-78-8P 326602-71-5P, Cyclohexene oxide-succinic anhydride
 copolymer 874769-63-8P 874769-64-9P 874801-75-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of polyesters with methacrylate pendant groups)
 IT 874769-64-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of polyesters with methacrylate pendant groups)
 RN 874769-64-9 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with
 dihydro-2,5-furandione and 7-oxabicyclo[4.1.0]heptane (9CI) (CA INDEX
 NAME)
 CM 1
 CRN 286-20-4
 CMF C6 H10 O



CM 2
 CRN 108-30-5
 CMF C4 H4 O3



CM 3
 CRN 106-91-2
 CMF C7 H10 O3



RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 6 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2005:428402 HCAPLUS
 DN 142:472692
 TI Patternable photocurable polymer compositions with good heat resistance
 and storage stability, transparent films and spacers therefrom, and
 displays therewith
 IN Sato, Hiroyuki; Itami, Setsuo; Watanabe, Eiji; Oizumi, Fumitaka
 PA Chisso Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 24 pp.

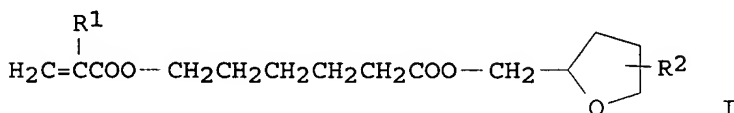
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005126699	A2	20050519	JP 2004-283981	20040929
PRAI	JP 2003-340255	A	20030930		
OS	MARPAT 142:472692				
GI					



AB The compns. comprise (A) alkali-soluble polymers prepared by radical polymerization of oxetanyl monomers 5-90, carboxyl-containing monomers 5-50, and I (R¹ = H, Me; R² = H, C1-5 alkyl; n = 1-5) 2-30%, (B) polymerizable double bond-containing compds., (C) photopolymer. initiators, (D) solvents (containing ≥20% of those with b.p. 100-200°), and optionally (E) thermally curable resins. Transparent films and spacers from the compns., showing good flexibility and compression recovery, are useful for liquid crystal displays, electroluminescent displays, etc.

IC ICM C08F220-28

ICS C08F002-50; G02F001-1339

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT 851517-69-6P, 3-Ethyl-3-methacryloxymethyloxetane-2-hydroxyethyl methacrylate-6-hydroxyhexanoic acid-methacrylic acid-tricyclo[5.2.1.0^{2,6}]decanyl methacrylate graft copolymer tetrahydrofuranylmethyl ester 851517-71-0P, Benzyl methacrylate-3-ethyl-3-methacryloxymethyloxetane-2-hydroxyethyl methacrylate-6-hydroxyhexanoic acid-methacrylic acid-tricyclo[5.2.1.0^{2,6}]decanyl methacrylate graft copolymer tetrahydrofuranylmethyl ester 851517-73-2P, 3-Ethyl-3-methacryloxymethyloxetane-2-hydroxyethyl methacrylate-6-hydroxyhexanoic acid-mono(2-methacryloyloxy ethyl) phthalate-tricyclo[5.2.1.0^{2,6}]decanyl methacrylate graft copolymer tetrahydrofuranylmethyl ester 851517-75-4P, 3-Ethyl-3-methacryloxymethyloxetane-2-hydroxyethyl methacrylate-6-hydroxyhexanoic acid-mono(2-methacryloyloxyethyl) maleate-tricyclo[5.2.1.0^{2,6}]decanyl methacrylate graft copolymer tetrahydrofuranylmethyl ester 851517-79-8P, 3-Ethyl-3-methacryloxymethyloxetane-6-hydroxyhexanoic acid-maleic anhydride-styrene graft copolymer, tetrahydrofuranylmethyl ester, 2-hydroxyethyl methacrylate ester 851517-81-2P, 3-Ethyl-3-methacryloxymethyloxetane-2-hydroxyethyl methacrylate-6-hydroxyhexanoic acid-methacrylic acid-tricyclo[5.2.1.0^{2,6}]decanyl methacrylate graft copolymer, tetrahydrofuranylmethyl ester, carbamate with 2-methacryloyloxyethyl isocyanate 851536-66-8P, Cyclohexene-3,4-dicarboxylic acid mono(2-methacryloyloxy ethyl) ester-3-ethyl-3-methacryloxymethyloxetane-2-hydroxyethyl methacrylate-6-hydroxyhexanoic acid-tricyclo[5.2.1.0^{2,6}]decanyl methacrylate graft copolymer tetrahydrofuranylmethyl ester 851536-68-0P

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or

engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(comprised of actual and assumed monomers; patternable photocurable polymer compns. with good heat resistance and storage stability for display transparent films or spacers)

IT 67653-78-5P, Dipentaerythritol hexaacrylate homopolymer 851486-19-6P
851486-20-9P 851486-21-0P 851486-22-1P
851486-23-2P 851486-24-3P 851486-25-4P 851486-26-5P
851517-82-3P, 3-Ethyl-3-methacryloxymethyloxetane-Kayarad TC
110S-maleic anhydride-styrene graft copolymer, ester with
2-hydroxyethyl methacrylate, polymer with 3,4-epoxycyclohexylmethyl
methacrylate-ethyl acrylate copolymer and dipentaerythritol
hexaacrylate-NK Oligo U 15HA copolymer 851517-84-5P,
3-Ethyl-3-methacryloxymethyloxetane-2-hydroxyethyl methacrylate-Kayarad TC
110S-methacrylic acid-tricyclo[5.2.1.0^{2,6}]decanyl methacrylate graft
copolymer, carbamate with 2-methacryloyloxyethyl isocyanate, polymer with
3,4-epoxycyclohexylmethyl methacrylate-ethyl acrylate copolymer and
dipentaerythritol hexaacrylate-NK Oligo U 15HA copolymer 851519-18-1P
851519-19-2P 851519-20-5P

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(patternable photocurable polymer compns. with good heat resistance and storage stability for display transparent films or spacers)

IT 851486-05-0P 851486-08-3P 851486-12-9P 851517-77-6P,
3-Ethyl-3-methacryloxymethyloxetane-Kayarad TC 110S-maleic
anhydride-styrene graft copolymer, ester with 2-hydroxyethyl
methacrylate 851517-80-1P, 3-Ethyl-3-methacryloxymethyloxetane-2-
hydroxyethyl methacrylate-Kayarad TC 110S-methacrylic acid-
tricyclo[5.2.1.0^{2,6}]decanyl methacrylate graft copolymer, carbamate with
2-methacryloyloxyethyl isocyanate 851519-15-8P 851519-16-9P
851519-17-0P

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(patternable photocurable polymer compns. with good heat resistance and storage stability for display transparent films or spacers)

IT 851486-20-9P 851486-22-1P 851486-23-2P
851517-82-3P, 3-Ethyl-3-methacryloxymethyloxetane-Kayarad TC
110S-maleic anhydride-styrene graft copolymer, ester with
2-hydroxyethyl methacrylate, polymer with 3,4-epoxycyclohexylmethyl
methacrylate-ethyl acrylate copolymer and dipentaerythritol
hexaacrylate-NK Oligo U 15HA copolymer 851517-84-5P,
3-Ethyl-3-methacryloxymethyloxetane-2-hydroxyethyl methacrylate-Kayarad TC
110S-methacrylic acid-tricyclo[5.2.1.0^{2,6}]decanyl methacrylate graft
copolymer, carbamate with 2-methacryloyloxyethyl isocyanate, polymer with
3,4-epoxycyclohexylmethyl methacrylate-ethyl acrylate copolymer and
dipentaerythritol hexaacrylate-NK Oligo U 15HA copolymer
851519-19-2P

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(patternable photocurable polymer compns. with good heat resistance and storage stability for display transparent films or spacers)

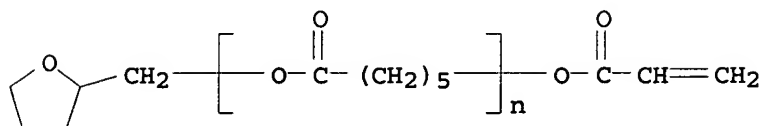
RN 851486-20-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with (3-ethyl-3-oxetanyl)methyl
2-methyl-2-propenoate, ethyl 2-propenoate, 2-hydroxyethyl
2-methyl-2-propenoate, octahydro-4,7-methano-1H-inden-5-yl
2-methyl-2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl
2-methyl-2-propenoate and α -[(tetrahydro-2-furanyl)methyl]- ω -
[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,6-hexanediyl)] (9CI) (CA INDEX
NAME)

CM 1

CRN 87320-06-7

CMF (C6 H10 O2)_n C8 H12 O3

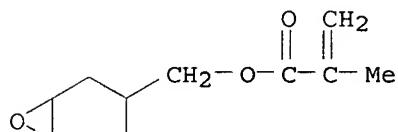
CCI PMS



CM 2

CRN 82428-30-6

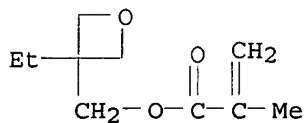
CMF C11 H16 O3



CM 3

CRN 37674-57-0

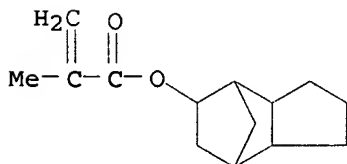
CMF C10 H16 O3



CM 4

CRN 34759-34-7

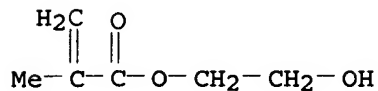
CMF C14 H20 O2



CM 5

CRN 868-77-9

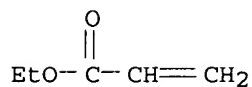
CMF C6 H10 O3



CM 6

CRN 140-88-5

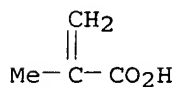
CMF C5 H8 O2



CM 7

CRN 79-41-4

CMF C4 H6 O2



RN 851486-22-1 HCAPLUS

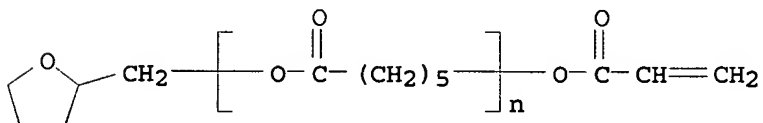
CN 1,2-Benzenedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with (3-ethyl-3-oxetanyl)methyl 2-methyl-2-propenoate, ethyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, octahydro-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate and α -[(tetrahydro-2-furanyl)methyl]- ω -[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,6-hexanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 87320-06-7

CMF (C6 H10 O2)_n C8 H12 O3

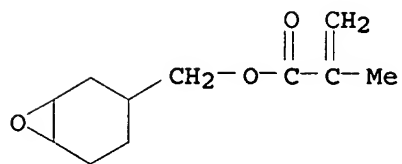
CCI PMS



CM 2

CRN 82428-30-6

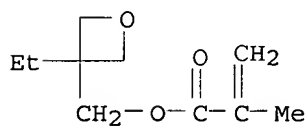
CMF C11 H16 O3



CM 3

CRN 37674-57-0

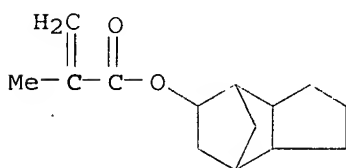
CMF C10 H16 O3



CM 4

CRN 34759-34-7

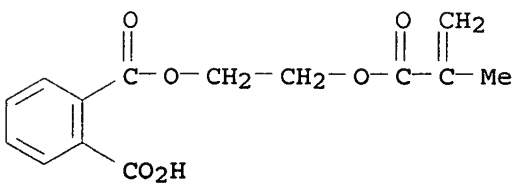
CMF C14 H20 O2



CM 5

CRN 27697-00-3

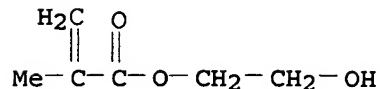
CMF C14 H14 O6



CM 6

CRN 868-77-9

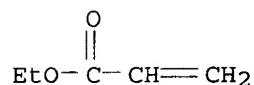
CMF C6 H10 O3



CM 7

CRN 140-88-5

CMF C5 H8 O2



RN 851486-23-2 HCAPLUS

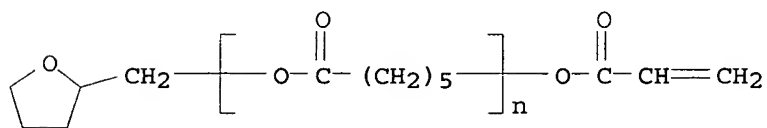
CN 2-Butenedioic acid (2Z)-, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with (3-ethyl-3-oxetanyl)methyl 2-methyl-2-propenoate, ethyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, octahydro-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate and α -[(tetrahydro-2-furanyl)methyl]- ω -[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,6-hexanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 87320-06-7

CMF (C6 H10 O2)_n C8 H12 O3

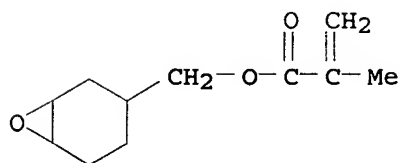
CCI PMS



CM 2

CRN 82428-30-6

CMF C11 H16 O3

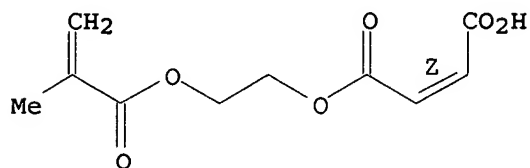


CM 3

CRN 51978-15-5

CMF C10 H12 O6

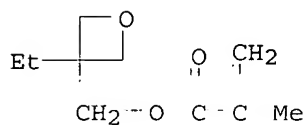
Double bond geometry as shown.



CM 4

CRN 37674-57-0

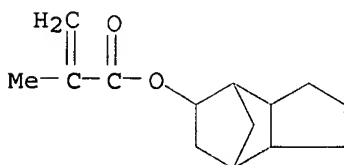
CMF C10 H16 O3



CM 5

CRN 34759-34-7

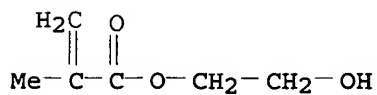
CMF C14 H20 O2



CM 6

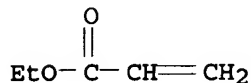
CRN 868-77-9

CMF C6 H10 O3



CM 7

CRN 140-88-5
CMF C5 H8 O2



RN 851517-82-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (3-ethyl-3-oxetanyl)methyl ester, polymer with ethenylbenzene, 2,5-furandione and α -[(tetrahydro-2-furanyl)methyl]- ω -[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,6-hexanediyl)] 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, graft, polymer with ethyl 2-propenoate, NK Oligo U 15HA, 7-oxabicyclo[4.1.0]hept-3-yl 2-methyl-2-propenoate and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

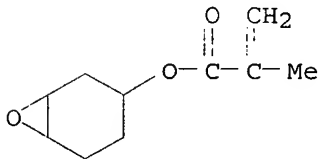
CM 1

CRN 161544-89-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

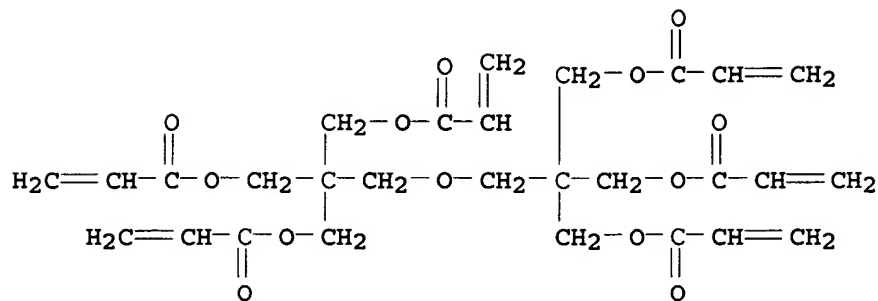
CM 2

CRN 125566-99-6
CMF C10 H14 O3



CM 3

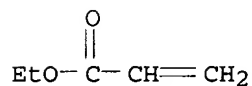
CRN 29570-58-9
CMF C28 H34 O13



CM 4

CRN 140-88-5

CMF C5 H8 O2



CM 5

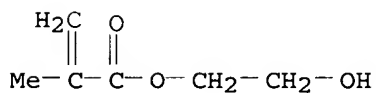
CRN 851517-77-6

$$\text{CMF} \quad (\text{C}_{10} \text{ H}_{16} \text{ O}_3 \cdot \text{C}_8 \text{ H}_8 \cdot (\text{C}_6 \text{ H}_{10} \text{ O}_2)_n \text{C}_8 \text{ H}_{12} \text{ O}_3 \cdot \text{C}_4 \text{ H}_2 \text{ O}_3)_x \cdot x \text{C}_6 \text{ H}_{10} \text{ O}_3$$

CM 6

CRN 868-77-9

CMF C6 H10 O3



CM 7

CRN 851517-76-5

$$\text{CMF} \quad (\text{C}_{10} \text{H}_{16} \text{O}_3 \cdot \text{C}_8 \text{H}_8 \cdot (\text{C}_6 \text{H}_{10} \text{O}_2)_n \text{C}_8 \text{H}_{12} \text{O}_3 \cdot \text{C}_4 \text{H}_2 \text{O}_3)_x$$

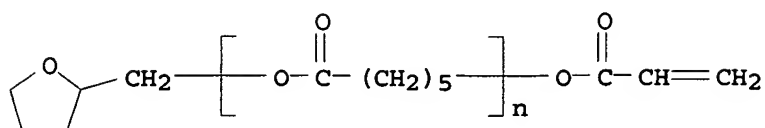
CCI PMS

CM 8

CRN 87320-06-7

CMF (C6 H10 O2)_n C8 H12 O3

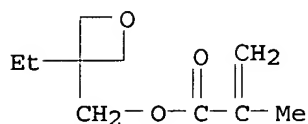
CCI PMS



CM 9

CRN 37674-57-0

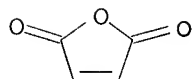
CMF C10 H16 O3



CM 10

CRN 108-31-6

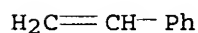
CMF C4 H2 O3



CM 11

CRN 100-42-5

CMF C8 H8



RN 851517-84-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with (3-ethyl-3-oxetanyl)methyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, octahydro-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate and α -[(tetrahydro-2-furanyl)methyl]- ω -[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,6-hexanediyl)], [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate, graft, polymer with ethyl 2-propenoate, NK Oligo U 15HA, 7-oxabicyclo[4.1.0]hept-3-yl 2-methyl-2-propenoate and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 161544-89-4

CMF Unspecified

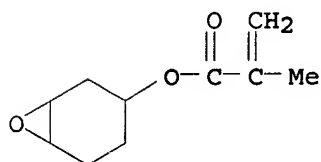
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 125566-99-6

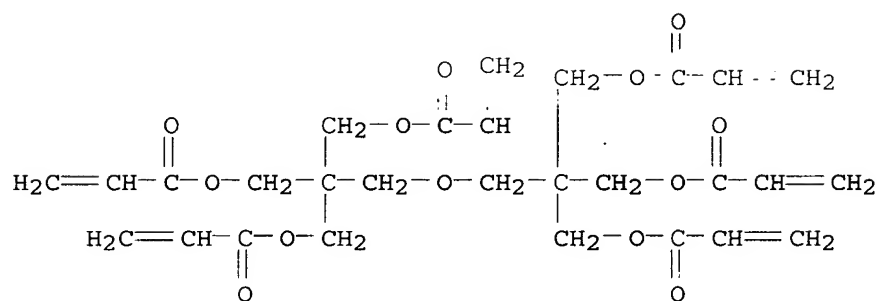
CMF C10 H14 O3



CM 3

CRN 29570-58-9

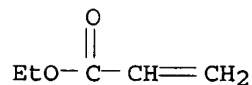
CMF C28 H34 O13



CM 4

CRN 140-88-5

CMF C5 H8 O2



CM 5

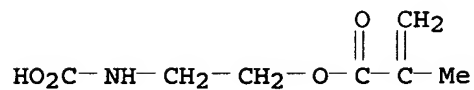
CRN 851517-80-1

CMF (C14 H20 O2 . C10 H16 O3 . C6 H10 O3 . (C6 H10 O2)n C8 H12 O3 . C4 H6 O2)x . x C7 H11 N O4

CM 6

CRN 96571-20-9

CMF C7 H11 N O4



CM 7

CRN 851486-02-7

CMF (C14 H20 O2 . C10 H16 O3 . C6 H10 O3 . (C6 H10 O2)n C8 H12 O3 . C4 H6 O2)x

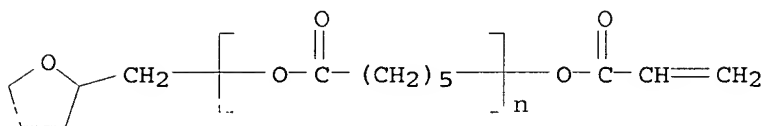
CCI PMS

CM 8

CRN 87320-06-7

CMF (C6 H10 O2)n C8 H12 O3

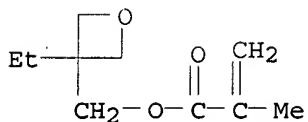
CCI PMS



CM 9

CRN 37674-57-0

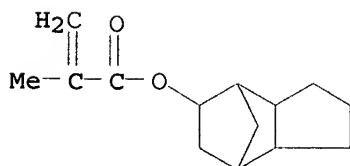
CMF C10 H16 O3



CM 10

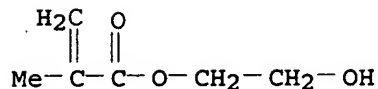
CRN 34759-34-7

CMF C14 H20 O2



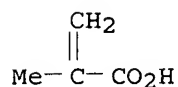
CM 11

CRN 868-77-9
CMF C6 H10 O3



CM 12

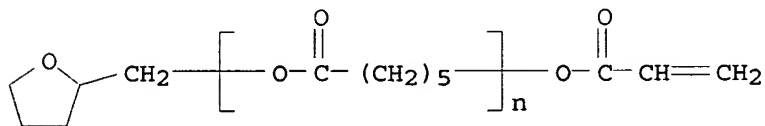
CRN 79-41-4
CMF C4 H6 O2



RN 851519-19-2 HCAPLUS
CN 4-Cyclohexene-1,2-dicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with (3-ethyl-3-oxetanyl)methyl 2-methyl-2-propenoate, ethyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, octahydro-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate and α -[(tetrahydro-2-furanyl)methyl]- ω -[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,6-hexanediyl)] (9CI) (CA INDEX NAME)

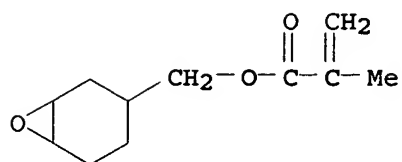
CM 1

CRN 87320-06-7
CMF (C6 H10 O2)_n C8 H12 O3
CCI PMS



CM 2

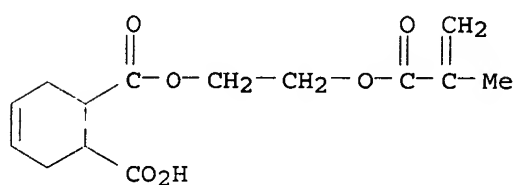
CRN 82428-30-6
CMF C11 H16 O3



CM 3

CRN 63306-05-8

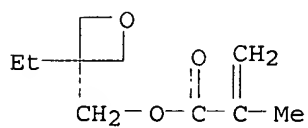
CMF C14 H18 O6



CM 4

CRN 37674-57-0

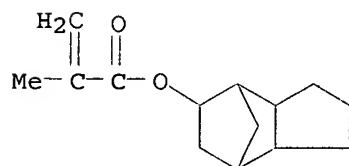
CMF C10 H16 O3



CM 5

CRN 34759-34-7

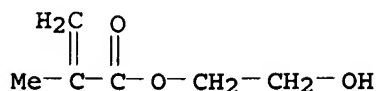
CMF C14 H20 O2



CM 6

CRN 868-77-9

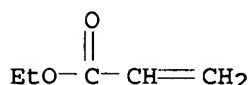
CMF C6 H10 O3



CM 7

CRN 140-88-5

CMF C5 H8 O2



L39 ANSWER 7 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:253730 HCAPLUS

DN 142:317604

TI Thermosetting resin compositions and their cured products with balanced hardness and flexibility and good solvent resistance

IN Takai, Hideyuki; Okazaki, Akira

PA Daicel Chemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

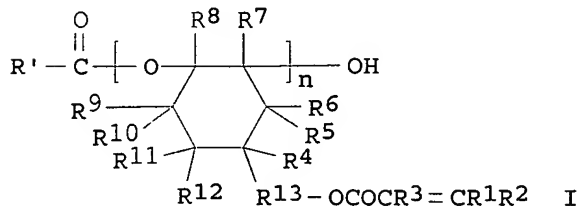
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005075906	A2	20050324	JP 2003-307129	20030829
PRAI	JP 2003-307129		20030829		

GI



AB The compns., useful for coatings, inks, resists, etc., comprise (A) polyfunctional (meth)acrylates I [R' = residue of R(CO₂H)_{n1} with Mn 46-3000; R = H, hydrocarbon group; R₁, R₂ = H; R₃ = H, Me; R₄-R₁₂ = H, Me, Et, Pr; R₁₃ = (un)substituted (CH₂)_{n2} (substituent = Me, Et, Pr), (CH₂OCOCH₂CH₂CH₂CH₂CH₂)_{n3}, (CH₂OCOCH₂CH₂CH₂CH₂)_{n3}, (CH₂OCOCH₂CHMeCH₂CH₂)_{n3}; n₁ = 1-30; n₂ = 1-6; n₃ = 1-20; n = 1-100] 15-95, (B) (meth)acrylates 5-85 (A + B = 100), and (C) thermal radical polymerization initiators 0.1-5 parts. Thus, 3,4-epoxycyclohexylmethyl acrylate (Cyclomer A 200) homopolymer monoacrylate, neopentyl glycol diacrylate, and initiators were

mixed and cured at 140° for 60 min to show gelation time 310 s,
pencil hardness 5H, and Tg 156°.

IC ICM C08F290-14

CC 37-6 (Plastics Manufacture and Processing)

IT Polyethers, preparation

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(acrylic; thermosetting acrylic polyoxycyclohexylene compns. with
balanced hardness and flexibility and good solvent resistance)

IT Polyethers, preparation

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)

(thermosetting acrylic polyoxycyclohexylene compns. with balanced
hardness and flexibility and good solvent resistance)

IT 1703-58-8DP, 1,2,3,4-Butanetetracarboxylic acid, esters with
epoxycyclohexylmethyl acrylate homopolymer 470481-20-ODP, MH 700, esters
with epoxycyclohexylmethyl acrylate homopolymer 524942-82-3P
524942-91-4P 525597-30-2P 525598-18-9P 847739-23-5P
847739-24-6P 847739-25-7P 847739-26-8P 847739-27-9P
847739-35-9DP, esters with polycarboxylic acids or anhydrides
847739-36-0P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP
(Preparation); RACT (Reactant or reagent)

(thermosetting acrylic polyoxycyclohexylene compns. with balanced
hardness and flexibility and good solvent resistance)

IT 524942-82-3P 524942-91-4P 847739-23-5P
847739-25-7P 847739-27-9P 847739-36-0P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP
(Preparation); RACT (Reactant or reagent)

(thermosetting acrylic polyoxycyclohexylene compns. with balanced
hardness and flexibility and good solvent resistance)

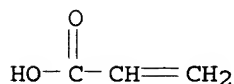
RN 524942-82-3 HCAPLUS

CN 2-Propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer,
mono-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7

CMF C3 H4 O2



CM 2

CRN 145961-32-6

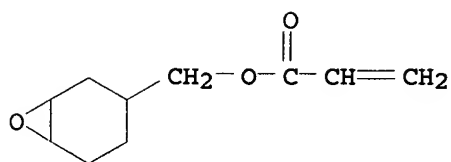
CMF (C10 H14 O3)x

CCI PMS

CM 3

CRN 64630-63-3

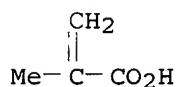
CMF C10 H14 O3



RN 524942-91-4 HCAPLUS
CN 2-Propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer,
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4
CMF C4 H6 O2

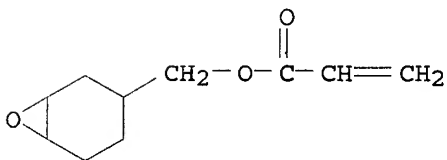


CM 2

CRN 145961-32-6
CMF (C10 H14 O3)x
CCI PMS

CM 3

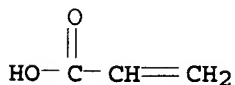
CRN 64630-63-3
CMF C10 H14 O3



RN 847739-23-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester,
homopolymer, mono-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

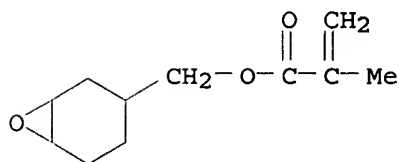


CM 2

CRN 128703-08-2
CMF (C11 H16 O3)x
CCI PMS

CM 3

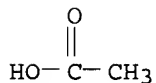
CRN 82428-30-6
CMF C11 H16 O3



RN 847739-25-7 HCAPLUS
CN 2-Propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer, monoacetate (9CI) (CA INDEX NAME)

CM 1

CRN 64-19-7
CMF C2 H4 O2

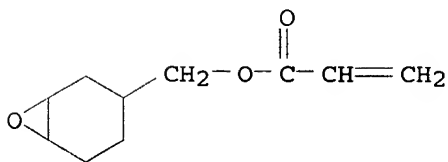


CM 2

CRN 145961-32-6
CMF (C10 H14 O3)x
CCI PMS

CM 3

CRN 64630-63-3
CMF C10 H14 O3



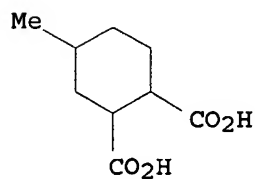
RN 847739-27-9 HCAPLUS
CN 2-Propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer, 1,2-cyclohexanedicarboxylate 4-methyl-1,2-cyclohexanedicarboxylate (9CI)

(CA INDEX NAME)

CM 1

CRN 57567-84-7

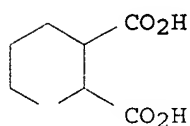
CMF C9 H14 O4



CM 2

CRN 1687-30-5

CMF C8 H12 O4



CM 3

CRN 145961-32-6

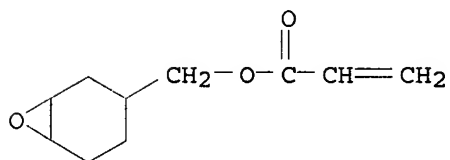
CMF (C10 H14 O3)x

CCI PMS

CM 4

CRN 64630-63-3

CMF C10 H14 O3



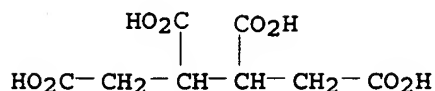
RN 847739-36-0 HCAPLUS

CN 2-Propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer,
1,2,3,4-butanetetracarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 1703-58-8

CMF C8 H10 O8



CM 2

CRN 145961-32-6

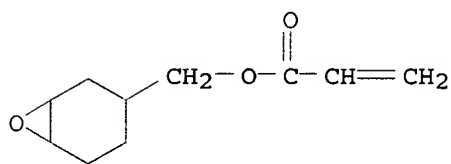
CMF (C10 H14 O3)x

CCI PMS

CM 3

CRN 64630-63-3

CMF C10 H14 O3



L39 ANSWER 8 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:235230 HCAPLUS

DN 142:325907

TI Photoimaging thermosetting resin composition sheets capable of giving warp-free thick films by one operation

IN Ikeguchi, Nobuyuki; Omori, Takafumi

PA Mitsubishi Gas Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005068308	A2	20050317	JP 2003-300900	20030826
PRAI	JP 2003-300900		20030826		

AB The sheets, useful for manufacture of protective films for printed circuit boards, have photoimaging thermosetting resin compns. having softening point <50° applied on release sheets. Preferably, the compns. contain (A) 5-35% epoxy resins, (B) 20-90% unsatd. bond-containing resins having acid value 40-200 mgKOH/g manufactured by treatment of 100 parts epoxy acrylates with 5-40 parts polyfunctional cyanuric esters, followed by treatment with 10-90 parts polybasic acids, (C) 1-30% ethylenically unsatd. monomers, and (D) 0.1-20% photoinitiators. The compns. show good acid, heat, and migration resistance, surface smoothness, and adhesion to substrates, after light exposure, development, and heating.

IC ICM C08G059-42

ICS C08F290-06; C08J005-18; G03F007-004; G03F007-027; H05K003-28

CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38, 76

IT Polyurethanes, preparation

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (epoxy-polyether-polyisocyanurate-, acrylic-; photoimaging thermosetting resin composition sheets capable of giving warp-free thick protective films for printed circuit boards by one operation)

IT Polyisocyanurates
 RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (epoxy-polyether-polyurethane-, acrylic-; photoimaging thermosetting resin composition sheets capable of giving warp-free thick protective films for printed circuit boards by one operation)

IT Polyethers, preparation
 RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (epoxy-polyisocyanurate-polyurethane-, acrylic-; photoimaging thermosetting resin composition sheets capable of giving warp-free thick protective films for printed circuit boards by one operation)

IT Polyurethanes, reactions
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (polyether-polyisocyanurate, acrylic-, polybasic acid esters; photoimaging thermosetting resin composition sheets capable of giving warp-free thick protective films for printed circuit boards by one operation)

IT Epoxy resins, preparation
 RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (polyether-polyisocyanurate-polyurethane-, acrylic-; photoimaging thermosetting resin composition sheets capable of giving warp-free thick protective films for printed circuit boards by one operation)

IT Polyisocyanurates
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (polyether-polyurethane-, acrylic-, polybasic acid esters; photoimaging thermosetting resin composition sheets capable of giving warp-free thick protective films for printed circuit boards by one operation)

IT Polyethers, reactions
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (polyisocyanurate-polyurethane-, acrylic-, polybasic acid esters; photoimaging thermosetting resin composition sheets capable of giving warp-free thick protective films for printed circuit boards by one operation)

IT 848134-50-9P 848141-63-9P 848141-64-0P 848141-65-1P
 RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (photoimaging thermosetting resin composition sheets capable of giving warp-free thick protective films for printed circuit boards by one operation)

IT 848134-50-9P 848141-63-9P 848141-65-1P
 RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (photoimaging thermosetting resin composition sheets capable of giving warp-free thick protective films for printed circuit boards by one operation)

operation)
 RN 848134-50-9 HCAPLUS
 CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), and 1,1'-(1-methylethylidene)bis[4-isocyanatobenzene] polymer with (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate hydrogen 1,2,4,5-benzenetetracarboxylate (9CI) (CA INDEX NAME)

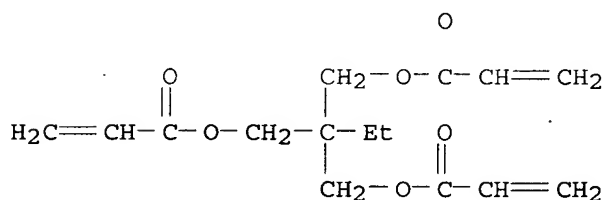
CM 1

CRN 244772-00-7
 CMF (C8 H12 O2)_n (C8 H12 O2)_n (C8 H12 O2)_n C6 H14 O3
 CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

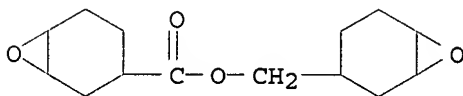
CM 2

CRN 15625-89-5
 CMF C15 H20 O6



CM 3

CRN 2386-87-0
 CMF C14 H20 O4

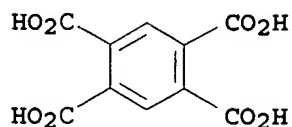


CM 4

CRN 848134-49-6
 CMF (C27 H32 O8 . C17 H14 N2 O2)_x . x C10 H6 O8

CM 5

CRN 89-05-4
 CMF C10 H6 O8



CM 6

CRN 848134-48-5

CMF (C27 H32 O8 . C17 H14 N2 O2)x

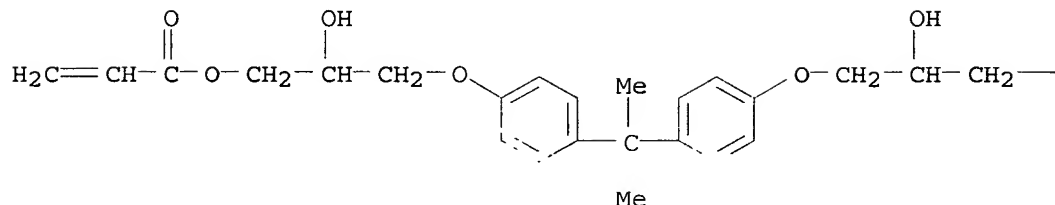
CCI PMS

CM 7

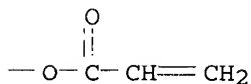
CRN 4687-94-9

CMF C27 H32 O8

PAGE 1-A



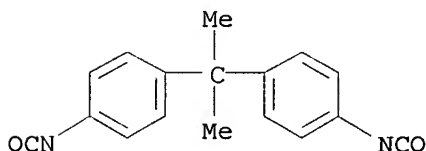
PAGE 1-B



CM 8

CRN 2470-48-6

CMF C17 H14 N2 O2



RN 848141-63-9 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with Denacol T, 1,1'-(1-methylethylidene)bis[4-isocyanatobenzene] polymer with (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate hydrogen 1,2,4,5-benzenetetracarboxylate, and oxybis(2,1-ethanediyl)oxy-2,1-ethanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

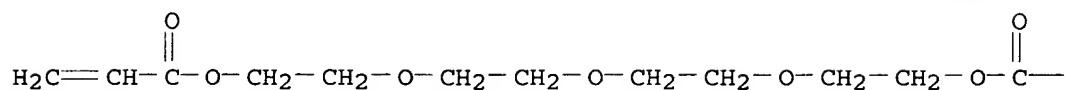
CRN 289650-53-9
CMF Unspecified
CCI PMS, MAN

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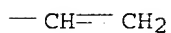
CM 2

CRN 17831-71-9
CMF C14 H22 O7

PAGE 1-A

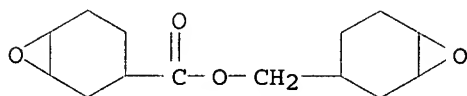


PAGE 1-B



CM 3

CRN 2386-87-0
CMF C14 H20 O4

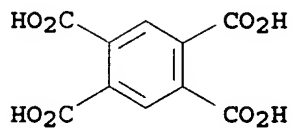


CM 4

CRN 848134-49-6
CMF (C27 H32 O8 . C17 H14 N2 O2)x . x C10 H6 O8

CM 5

CRN 89-05-4
CMF C10 H6 O8



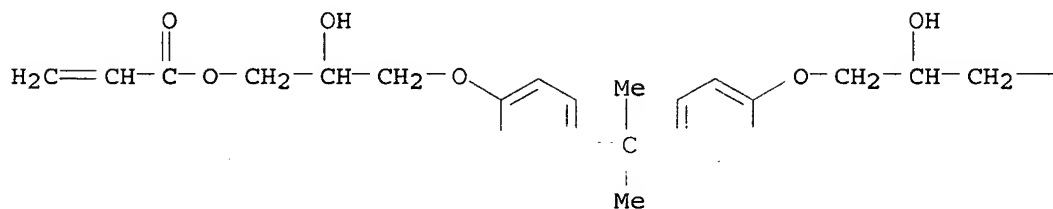
CM 6

CRN 848134-48-5
CMF (C27 H32 O8 . C17 H14 N2 O2)x
CCI PMS

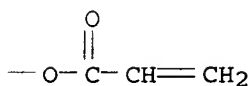
CM 7

CRN 4687-94-9
CMF C27 H32 O8

PAGE 1-A

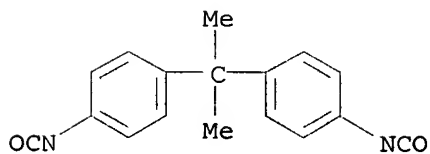


PAGE 1-B



CM 8

CRN 2470-48-6
CMF C17 H14 N2 O2



RN 848141-65-1 HCAPLUS
CN Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with Denacol T, 2-ethyl-2-[[[1-oxo-2-propenyl)oxy)methyl]-1,3-propanediyl di-2-propenoate, α-hydro-ω-hydroxypoly[oxy(oxiranyl-1,2-cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 1,1'-(1-

methylethylidene)bis[4-isocyanatobenzene] polymer with
 (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)]
 di-2-propenoate hydrogen 4-cyclohexene-1,2-dicarboxylate,
 1,1'-(1-methylethylidene)bis[4-isocyanatobenzene] polymer with
 (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)]
 di-2-propenoate hydrogen 1,2,4,5-benzenetetracarboxylate, and
 oxybis(2,1-ethanediyl)oxy-2,1-ethanediyl di-2-propenoate (9CI) (CA INDEX
 NAME)

CM 1

CRN 289650-53-9
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

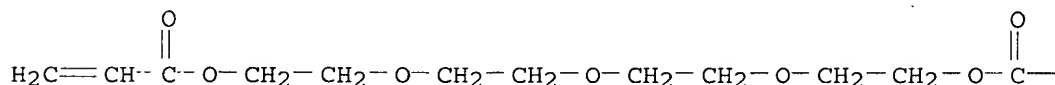
CRN 244772-00-7
 CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3
 CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

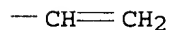
CM 3

CRN 17831-71-9
 CMF C14 H22 O7

PAGE 1-A

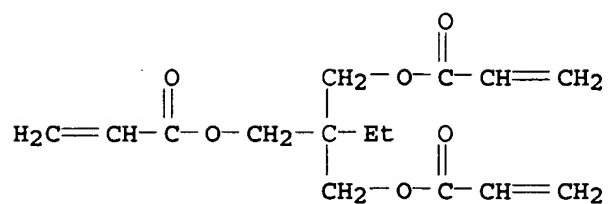


PAGE 1-B



CM 4

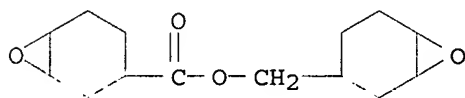
CRN 15625-89-5
 CMF C15 H20 O6



CM 5

CRN 2386-87-0

CMF C14 H20 O4



CM 6

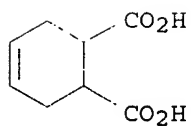
CRN 848141-62-8

CMF (C27 H32 O8 . C17 H14 N2 O2)x . x C8 H10 O4

CM 7

CRN 88-98-2

CMF C8 H10 O4



CM 8

CRN 848134-48-5

CMF (C27 H32 O8 . C17 H14 N2 O2)x

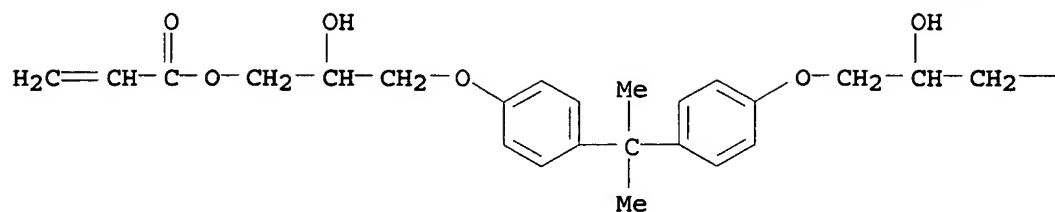
CCI PMS

CM 9

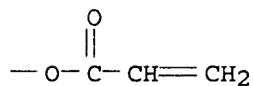
CRN 4687-94-9

CMF C27 H32 O8

PAGE 1-A



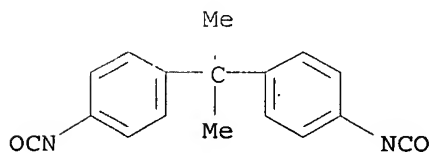
PAGE 1-B



CM 10

CRN 2470-48-6

CMF C17 H14 N2 O2



CM 11

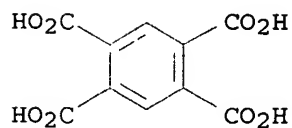
CRN 848134-49-6

CMF (C27 H32 O8 . C17 H14 N2 O2)x . x C10 H6 O8

CM 12

CRN 89-05-4

CMF C10 H6 O8



CM 13

CRN 848134-48-5

CMF (C27 H32 O8 . C17 H14 N2 O2)x

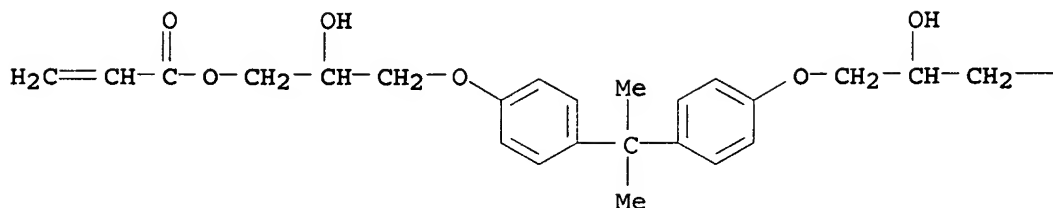
CCI PMS

CM 14

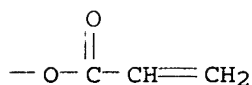
CRN 4687-94-9

CMF C27 H32 O8

PAGE 1-A



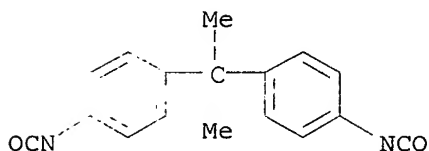
PAGE 1-B



CM 15

CRN 2470-48-6

CMF C17 H14 N2 O2



L39 ANSWER 9 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:215909 HCAPLUS

DN 142:281180

TI Polythiophenylene compositions with good adhesion to epoxy resins and thermal shock resistance, and composite moldings using them

IN Suzuki, Shigemitsu; Iwamura, Naoya; Hirai, Akira

PA Toray Industries, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005060454	A2	20050310	JP 2003-208115	20030820
PRAI	JP 2003-208115		20030820		

AB The comps. comprise (A) polythiophenylenes 100, (B) alkoxy silanes 0.1-5, (C) polyolefins having ≥ 1 epoxy groups and/or acid anhydride groups 1-50, (D) epoxy resins 0.5-15, and (E) glass fibers 10-100 parts. Thus, a composition with good flowability and low

volatile content comprising 1,4-dichlorobenzene-sodium hydrogen sulfide copolymer 100, glycidoxypropyltrimethoxysilane (SH 6040) 1.0, ethylene-glycidyl methacrylate copolymer (BF-E) 10, bisphenol A epoxy resin (Epikote 1009) 4, and glass fibers (T 747GH) 30 parts was injection-molded to give test pieces showing adhesion strength to a cured epoxy resin 14 MPa/50 mm² and decreased flashes.

IC ICM C08L081-02

ICS C08K005-00; C08K005-5415; C08K007-14; C08L023-00; C08L063-00

CC 38-3 (Plastics Fabrication and Uses)

IT 847460-73-5P 847460-74-6P

RL: PNU (Preparation, unclassified); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)

(polythiophenylene compns. with good adhesion to epoxy resins and thermal shock resistance for composite moldings)

IT 847460-74-6P

RL: PNU (Preparation, unclassified); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)

(polythiophenylene compns. with good adhesion to epoxy resins and thermal shock resistance for composite moldings)

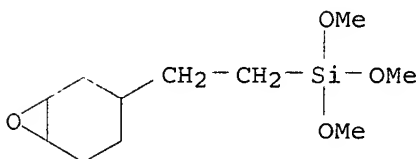
RN 847460-74-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with (chloromethyl)oxirane, ethene, 4,4'-(1-methylethylidene)bis[phenol] and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 3388-04-3

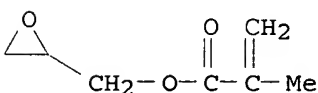
CMF C11 H22 O4 Si



CM 2

CRN 106-91-2

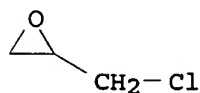
CMF C7 H10 O3



CM 3

CRN 106-89-8

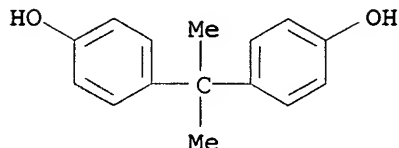
CMF C3 H5 Cl O



CM 4

CRN 80-05-7

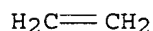
CMF C15 H16 O2



CM 5

CRN 74-85-1

CMF C2 H4



L39 ANSWER 10 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:155837 HCAPLUS

DN 142:248918

TI Highly sensitive radiation-curable polymer compositions for manufacture of interlayer insulator films and microlenses

IN Nishimura, Hideki; Minowa, Takaki; Takamoto, Eiji; Sano, Kimiyasu; Nishikawa, Michinori

PA JSR Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 34 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005049691	A2	20050224	JP 2003-282830	20030730
PRAI	JP 2003-282830		20030730		

AB The comps. comprise (A) copolymers prepared from (a1) unsatd. carboxylic acids (anhydrides), (a2) epoxydicyclopentyl-, epoxycyclohexyl-, or epoxycyclopentyl-containing unsatd. compds., and (a3) other unsatd. compds., and (B) 1,2-naphthoquinonediazide sulfonate esters. The interlayer insulator films and microlenses are manufactured by applying the comps. on substrates, irradiation, development, and heating. The comps. give precise patterns with good heat and solvent resistance and high transparency.

IC ICM G03F007-033

ICS G02B001-04; G02B003-00; G03F007-022; G03F007-40; H01L021-027

CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38, 73, 76

IT 844869-00-7P 844869-01-8P 844869-02-9P 844869-03-0P
844869-04-1P 844869-05-2P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
 (highly sensitive radiation-curable alicyclic epoxy-containing polymer compns. for manufacture of interlayer insulator films and microlenses)

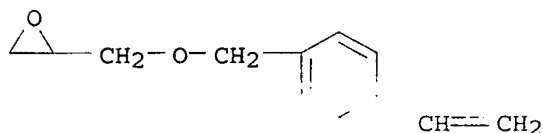
IT **844869-04-1P 844869-05-2P**
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
 (highly sensitive radiation-curable alicyclic epoxy-containing polymer compns. for manufacture of interlayer insulator films and microlenses)

RN 844869-04-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with dodecyl 2-methyl-2-propenoate, ethenylbenzene, [[(4-ethenylphenyl)methoxy]methyl]oxirane, octahydro-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

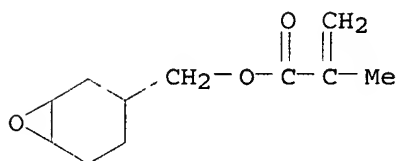
CM 1

CRN 113538-80-0
 CMF C12 H14 O2



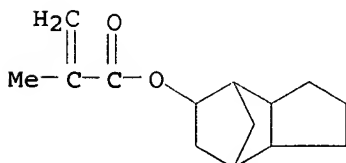
CM 2

CRN 82428-30-6
 CMF C11 H16 O3



CM 3

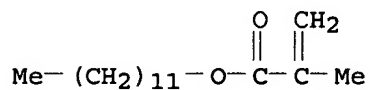
CRN 34759-34-7
 CMF C14 H20 O2



CM 4

CRN 142-90-5

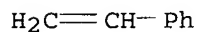
CMF C16 H30 O2



CM 5

CRN 100-42-5

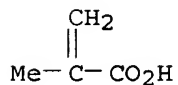
CMF C8 H8



CM 6

CRN 79-41-4

CMF C4 H6 O2



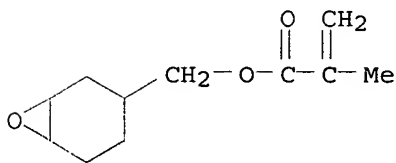
RN 844869-05-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with dodecyl 2-methyl-2-propenoate, ethenylbenzene, octahydro-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 82428-30-6

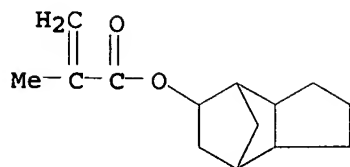
CMF C11 H16 O3



CM 2

CRN 34759-34-7

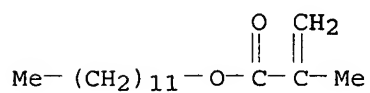
CMF C14 H20 O2



CM 3

CRN 142-90-5

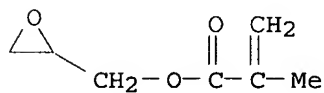
CMF C16 H30 O2



CM 4

CRN 106-91-2

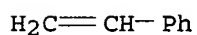
CMF C7 H10 O3



CM 5

CRN 100-42-5

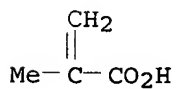
CMF C8 H8



CM 6

CRN 79-41-4

CMF C4 H6 O2



L39 ANSWER 11 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2005:33665 HCAPLUS
 DN 142:103483

TI Storage-stable curable polymer compositions for protective and planarization films of color filters

IN Baba, Atsushi; Nishikawa, Michinori

PA JSR Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 42 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005008847	A2	20050113	JP 2003-305945	20030829
	KR 2004103328	A	20041208	KR 2004-37645	20040527
PRAI	JP 2003-150242	A	20030528		
	JP 2003-305945	A	20030829		

AB The compns., useful for liquid crystal displays, charge-coupled devices, etc., comprise (A) cyclocyclic polymers containing epoxy groups chosen from dicyclopentadiene monoepoxide, epoxycyclohexane, and epoxycyclopentane, and (B) other cationically polymerizable compds. The protective films show good storage stability and heat resistance, and improved adhesion.

IC ICM C08F020-32

ICS C08F012-22; C08F016-26; C08F220-02; C08F222-02; C08G059-20

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38, 73

ST protective planarization film color filter epoxy resin; epoxycyclohexylmethyl methacrylate styrene bisphenol epoxy trimellitic anhydride; LCD charge coupled device protective film

IT 819070-68-3P 819070-69-4P 819070-70-7P 819070-71-8P

819070-72-9P 819070-73-0P 819070-74-1P 819070-75-2P

819070-76-3P 819070-77-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(storage-stable curable polymer compns. for protective and planarization films of color filters)

IT 552-30-7, Trimellitic anhydride

RL: RCT (Reactant); RACT (Reactant or reagent)

(storage-stable curable polymer compns. for protective and planarization films of color filters)

IT 819070-69-4P 819070-73-0P 819070-75-2P

819070-76-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(storage-stable curable polymer compns. for protective and planarization films of color filters)

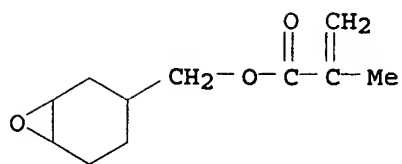
RN 819070-69-4 HCAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, polymer with (chloromethyl)oxirane, ethenylbenzene, 4,4'-(1-methylethylidene)bis[phenol] and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 82428-30-6

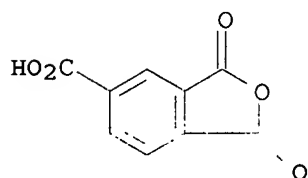
CMF C11 H16 O3



CM 2

CRN 552-30-7

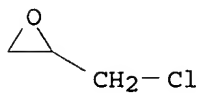
CMF C9 H4 O5



CM 3

CRN 106-89-8

CMF C3 H5 Cl O



CM 4

CRN 100-42-5

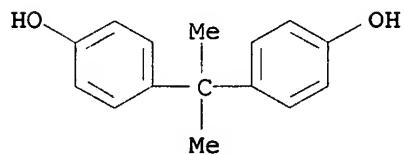
CMF C8 H8

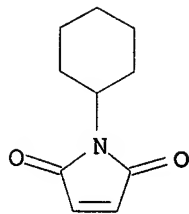


CM 5

CRN 80-05-7

CMF C15 H16 O2

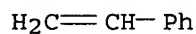




CM 4

CRN 100-42-5

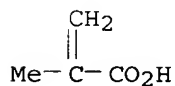
CMF C8 H8



CM 5

CRN 79-41-4

CMF C4 H6 O2



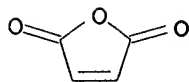
RN 819070-75-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with 1-cyclohexyl-1H-pyrrole-2,5-dione, ethenylbenzene, 3,3'-[[2-ethyl-2-[[[(3-ethyl-3-oxetanyl)methoxy]methyl]-1,3-propanediyl]bis(oxymethylene)]bis[3-ethyloxetane] and 2,5-furandione (9CI)
(CA INDEX NAME)

CM 1

CRN 180423-87-4

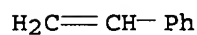
CMF C24 H44 O6



CM 5

CRN 100-42-5

CMF C8 H8



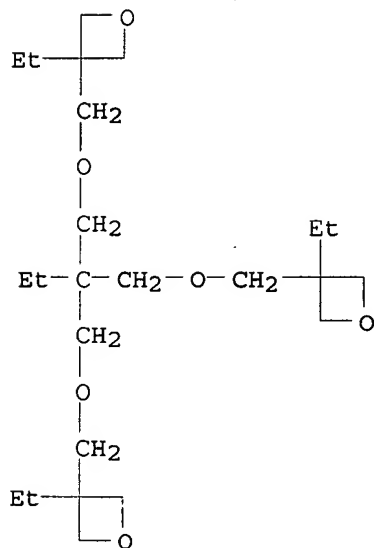
RN 819070-76-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-(cyclohexyloxy)ethyl ester, polymer with ethenylbenzene, 3,3'-[[2-ethyl-2-[[[(3-ethyl-3-oxetanyl)methoxy]methyl]-1,3-propanediyl]bis(oxyethylene)]bis[3-ethyloxetane], octahydro-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 180423-87-4

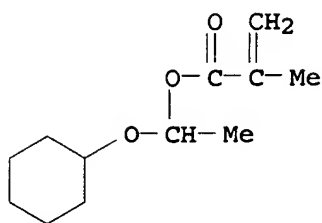
CMF C24 H44 O6



CM 2

CRN 143556-62-1

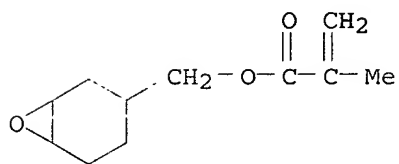
CMF C12 H20 O3



CM 3

CRN 82428-30-6

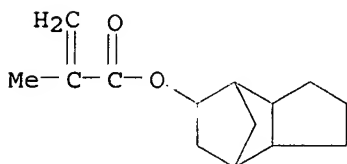
CMF C11 H16 O3



CM 4

CRN 34759-34-7

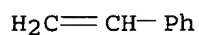
CMF C14 H20 O2



CM 5

CRN 100-42-5

CMF C8 H8



L39 ANSWER 12 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:9532 HCAPLUS

DN 142:94821

TI Polyfunctional (meth)acrylate esters, their manufacture, radiation-curable compositions, and their cured products

IN Yoshida, Yukio

PA Daicel-Ucb Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005002064	A2	20050106	JP 2003-169203	20030613
PRAI	JP 2003-169203		20030613		

AB The esters, useful for coatings, adhesives, inks, and resists, are manufactured by esterification of OH-containing (meth)acrylates with compds. having ≥ 2 acid anhydride groups and reaction of CO₂H of the products with epoxy-containing (meth)acrylates. Thus, pyromellitic anhydride was esterified with Blemmer AP 400 and further esterified with 4-hydroxybutyl acrylate glycidyl ether to give a polyfunctional acrylate, which was cured by UV to give a coating film showing good flexibility, adhesion with a substrate, breaking strength, and elastic modulus.

IC ICM C07C067-30
ICS C07C067-26; C07C069-76; C07C069-92; C08F220-26; C09D004-06; C09D005-00; C09D011-10; C09J004-06

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 42, 74

ST polyfunctional acrylate manuf radiation curable coating; resist polyfunctional acrylate manuf esterification anhydride; ink radiation curable polyfunctional acrylate manuf; adhesive radiation curable polyfunctional acrylate manuf

IT 819795-50-1P, Blemmer AP 400, ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether 819795-51-2P, Blemmer PE 200, ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether 819795-52-3P, Placel FA 2D ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether 819795-53-4P, Placel FM 1 ester with pyromellitic anhydride, ester with Blemmer GMA 819795-54-5P 819795-55-6P, Placel FA 2D ester with pyromellitic anhydride, ester with Cyclomer A 200 819795-56-7P, Placel FA 2D ester with 3,3',4,4'-benzophenonetetracarboxylic dianhydride, ester with 4-hydroxybutyl acrylate glycidyl ether 819795-57-8P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(manufacture of polyfunctional (meth)acrylate esters for radiation-curable compns.)

IT 42978-66-5DP, Tripropylene glycol diacrylate, polymers with polyfunctional acrylates, phenoxyethyl acrylate, and silicone acrylate 48145-04-6DP, Phenoxyethyl acrylate, polymers with polyfunctional acrylates, tripropylene glycol diacrylate, and silicone acrylate 819795-58-9P, Blemmer AP 400, ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, homopolymer 819795-59-0P, Blemmer PE 200, ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, homopolymer 819795-60-3P, Placel FA 2D ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, homopolymer 819795-61-4P, Placel FM 1 ester with pyromellitic anhydride, ester with Blemmer GMA, homopolymer 819795-62-5P, Placel FA 2D ester with pyromellitic anhydride, ester with Blemmer GMA, homopolymer 819795-63-6P, Placel FA 2D ester with pyromellitic anhydride, ester with Cyclomer A 200, homopolymer 819795-64-7P, Placel FA 2D ester with 3,3',4,4'-benzophenonetetracarboxylic dianhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, homopolymer 819795-65-8P, Placel FA 2D ester with 4,4'-oxydiphthalic dianhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, homopolymer 819795-66-9P,

Blemmer AP 400, ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with OTA 480 and Ebecryl 525 819795-67-0P, Blemmer PE 200, ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with OTA 480 and Ebecryl 525 819795-68-1P, Placel FA 2D ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with OTA 480 and Ebecryl 525 819795-69-2P, Placel FM 1 ester with pyromellitic anhydride, ester with Blemmer GMA, polymer with OTA 480 and Ebecryl 525 819795-70-5P, Placel FA 2D ester with pyromellitic anhydride, ester with Blemmer GMA, polymer with OTA 480 and Ebecryl 525 819795-71-6P, Placel FA 2D ester with pyromellitic anhydride, ester with Cyclomer A 200, polymer with OTA 480 and Ebecryl 525 819795-72-7P, Placel FA 2D ester with 3,3',4,4'-benzophenonetetracarboxylic dianhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with OTA 480 and Ebecryl 525 819795-73-8P, Placel FA 2D ester with 4,4'-oxydiphthalic dianhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with OTA 480 and Ebecryl 525 819795-74-9P, Blemmer AP 400, ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with Ebecryl 168, isobornyl acrylate, and phenoxyethyl acrylate 819795-75-0P, Blemmer PE 200, ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with Ebecryl 168, isobornyl acrylate, and phenoxyethyl acrylate 819795-76-1P, Placel FA 2D ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with Ebecryl 168, isobornyl acrylate, and phenoxyethyl acrylate 819795-77-2P, Placel FM 1 ester with pyromellitic anhydride, ester with Blemmer GMA, polymer with Ebecryl 168, isobornyl acrylate, and phenoxyethyl acrylate 819795-78-3P, Placel FA 2D ester with pyromellitic anhydride, ester with Blemmer GMA, polymer with Ebecryl 168, isobornyl acrylate, and phenoxyethyl acrylate 819795-79-4P, Placel FA 2D ester with pyromellitic anhydride, ester with Cyclomer A 200, polymer with Ebecryl 168, isobornyl acrylate, and phenoxyethyl acrylate 819795-80-7P, Placel FA 2D ester with 3,3',4,4'-benzophenonetetracarboxylic dianhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with Ebecryl 168, isobornyl acrylate, and phenoxyethyl acrylate 819795-81-8P, Placel FA 2D ester with 4,4'-oxydiphthalic dianhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with Ebecryl 168, isobornyl acrylate, and phenoxyethyl acrylate 819795-82-9P, Blemmer AP 400, ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with Cyclomer P-ACA 250 and DEN 431 819795-83-0P, Blemmer PE 200, ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with Cyclomer P-ACA 250 and DEN 431 819795-84-1P, Placel FA 2D ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with Cyclomer P-ACA 250 and DEN 431 819795-85-2P, Placel FM 1 ester with pyromellitic anhydride, ester with Blemmer GMA, polymer with Cyclomer P-ACA 250 and DEN 431 819795-86-3P, Placel FA 2D ester with pyromellitic anhydride, ester with Blemmer GMA, polymer with Cyclomer P-ACA 250 and DEN 431 819795-87-4P, Placel FA 2D ester with pyromellitic anhydride, ester with Cyclomer A 200, polymer with Cyclomer P-ACA 250 and DEN 431 819795-88-5P, Placel FA 2D ester with 3,3',4,4'-benzophenonetetracarboxylic dianhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with Cyclomer P-ACA 250 and DEN 431 819795-89-6P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of polyfunctional (meth)acrylate esters for radiation-curable

compns.)

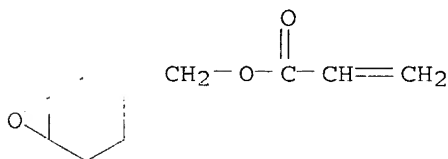
IT 819795-82-9P, Blemmer AP 400, ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with Cyclomer P-ACA 250 and DEN 431 819795-83-0P, Blemmer PE 200, ester with pyromellitic anhydride, ester with 4-hydroxybutyl acrylate glycidyl ether, polymer with Cyclomer P-ACA 250 and DEN 431 819795-89-6P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (manufacture of polyfunctional (meth)acrylate esters for radiation-curable compns.)

RN 819795-82-9 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with DEN 431, methyl 2-methyl-2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate and α -(1-oxo-2-propenyl)- ω -hydroxypoly[oxy(methyl-1,2-ethanediyl)] hydrogen 1,2,4,5-benzenetetracarboxylate 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 64630-63-3

CMF C10 H14 O3



CM 2

CRN 37348-52-0

CMF Unspecified

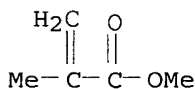
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 80-62-6

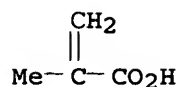
CMF C5 H8 O2



CM 4

CRN 79-41-4

CMF C4 H6 O2



CM 5

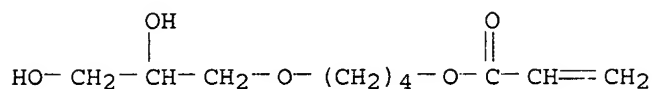
CRN 819795-50-1

CMF C10 H18 O5 . x C10 H6 O8 . x (C3 H6 O)n C3 H4 O2

CM 6

CRN 251298-12-1

CMF C10 H18 O5

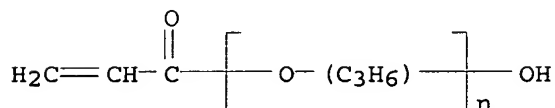


CM 7

CRN 50858-51-0

CMF (C3 H6 O)n C3 H4 O2

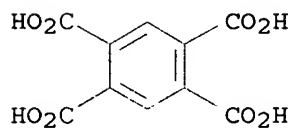
CCI IDS, PMS



CM 8

CRN 89-05-4

CMF C10 H6 O8

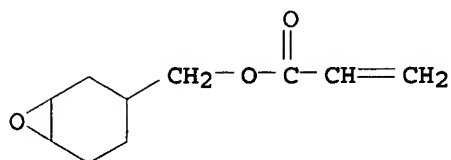


RN 819795-83-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with DEN 431, methyl 2-methyl-2-propenoate, α -(2-methyl-1-oxo-2-propenyl)- ω -hydroxypoly(oxy-1,2-ethanediyl) hydrogen 1,2,4,5-benzenetetracarboxylate 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 64630-63-3
CMF C10 H14 O3



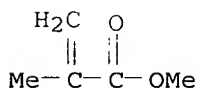
CM 2

CRN 37348-52-0
CMF Unspecified
CCI PMS, MAN

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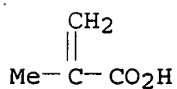
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2

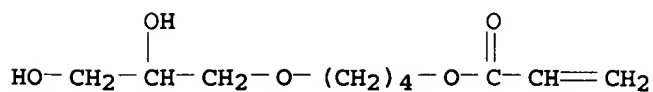


CM 5

CRN 819795-51-2
CMF C10 H18 O5 . x C10 H6 O8 . x (C2 H4 O)n C4 H6 O2

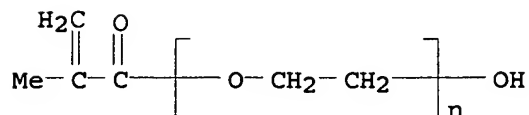
CM 6

CRN 251298-12-1
CMF C10 H18 O5



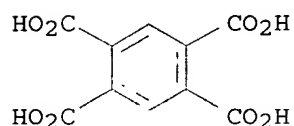
CM 7

CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



CM 8

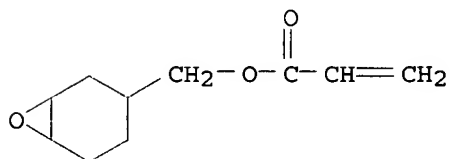
CRN 89-05-4
CMF C10 H6 O8



RN 819795-89-6 HCAPLUS
CN 1,2-Benzenedicarboxylic acid, 4,4'-oxybis-, 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl 6-oxo-6-[[6-oxo-6-[2-[(1-oxo-2-propenyl)oxy]ethoxy]hexyl]oxy]hexyl ester, polymer with DEN 431, methyl 2-methyl-2-propenoate, 2-methyl-2-propenoic acid and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 64630-63-3
CMF C10 H14 O3



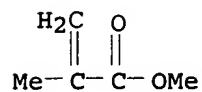
CM 2

CRN 37348-52-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

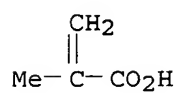
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2

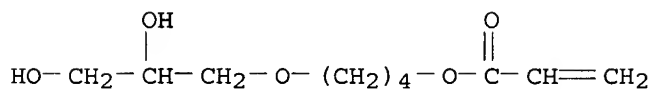


CM 5

CRN 819795-57-8
CMF C17 H28 O7 . x C16 H10 O9 . x C10 H18 O5

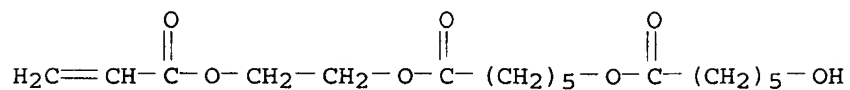
CM 6

CRN 251298-12-1
CMF C10 H18 O5



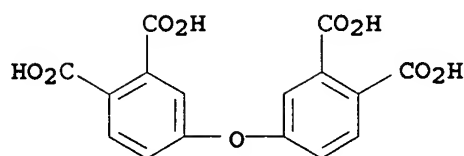
CM 7

CRN 80413-52-1
CMF C17 H28 O7



CM 8

CRN 7717-76-2
CMF C16 H10 O9



L39 ANSWER 13 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:842333 HCAPLUS

DN 141:366904

TI Curable compositions with good hardness and low cure shrinkage and cure-treated articles

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 64 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004285320	A2	20041014	JP 2003-321972	20030912
PRAI	JP 2002-277507	A	20020924		
	JP 2003-59014	A	20030305		

AB Title comps. comprise (A) monofunctional polyester macromers having weight average mol. weight $\leq 2 + 104$ and polymerizable group at one end and (B) polymerization initiators. Thus, 26.4 g 1,6-hexanediol and 38 g tricyclo[5.2.1.0^{2,6}]decane-8,9-dicarboxylic acid were polymerized to give a copolymer with hydroxy value 500 $\mu\text{mol/g}$ and carboxy value 500 $\mu\text{mol/g}$, 50 g of which was mixed with 4.3 g methacrylic acid and 1.0 g tert-butylhydroquinone and reacted in the presence of dicyclohexylcarbodiimide and 4-(N,N-dimethyl)aminopyridine to give a macromonomer with Mw 5 + 103 and hydroxy value 5 $\mu\text{mol/g}$, 50 g of the macromonomer was mixed with cyclohexyl acrylate 25, Me methacrylate 25, fine particle dispersion comprising Me iso-Bu ketone 234, anionic group-containing surface treatment agent 36, and alumina particle 180 g 40 (solid base), Me iso-Bu ketone 300, and Irgacure 184 8.5 g, applied on a polyethylene terephthalate film, dried at 120° for 2 min, irradiated, and heated at 120° for 10 min to give a test piece with pencil hardness 3H, good crack and scratch resistance and adhesion, and low shrinkage.

IC ICM C08F290-06

ICS C09D004-00; C09D005-00; C09D007-12; C09D167-06; G02B001-10

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 74

IT 776317-03-4P 776317-05-6P 776317-07-8P 776317-09-0P 776317-27-2P
776317-28-3P 776317-32-9P 776317-34-1P 776317-36-3P 776317-38-5P
776317-41-0P 776317-43-2P 777091-45-9P 777091-49-3P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(curable comps. with good hardness and low cure shrinkage and cure-treated articles)

IT 692778-56-6P 693236-49-6P, 1,4-Cyclohexanedimethanol-succinic anhydride copolymer monoacrylate 776316-41-7P 776329-12-5P 776329-13-6P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT

(Reactant or reagent)

(macromonomer; curable compns. with good hardness and low cure shrinkage)

IT 776317-43-2P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); **PREP** (Preparation); USES (Uses)

(curable compns. with good hardness and low cure shrinkage and cure-treated articles)

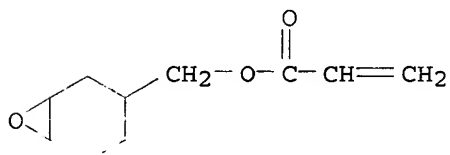
RN 776317-43-2 HCAPLUS

CN Heptanedioic acid, polymer with 2,2'-[[2-ethyl-2-[(oxiranylmethoxy)methyl]-1,3-propanediyl]bis(oxymethylene)]bis[oxirane], octahydro-4,7-methano-1H-indene-1,2-diol and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 64630-63-3

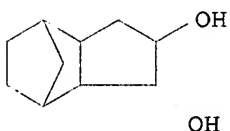
CMF C10 H14 O3



CM 2

CRN 4728-34-1

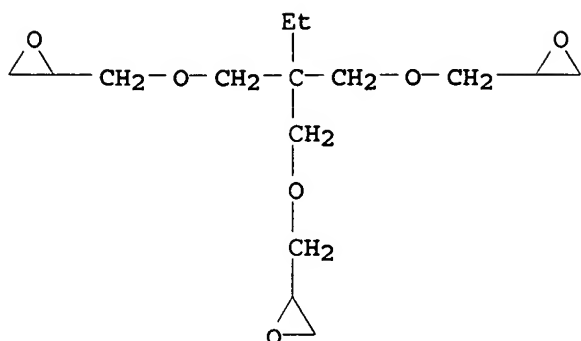
CMF C10 H16 O2



CM 3

CRN 3454-29-3

CMF C15 H26 O6



CM 4

CRN 111-16-0

CMF C7 H12 O4

HO₂C-(CH₂)₅-CO₂H

L39 ANSWER 14 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:767383 HCAPLUS

DN 141:411729

TI Novel thermally degradable diepoxy crosslinkers containing sulfonate ester groups for photo-crosslinking

AU Shin, Yeong-Deuk; Kawaue, Akiya; Okamura, Haruyuki; Shirai, Masamitsu

CS Department of Applied Chemistry, Osaka Prefecture University, 1-1 Gakuen-cho, Sakai, Osaka, 599-8531, Japan

SO Polymer Degradation and Stability (2004), 86(1), 153-158

CODEN: PDSTDW; ISSN: 0141-3910

PB Elsevier B.V.

DT Journal

LA English

AB New diepoxy crosslinkers (Cr-1, Cr-2 and Cr-3) containing thermally degradable sulfonate ester linkages were synthesized and characterized. From FT-IR and UV spectroscopic expts., it was confirmed that Cr-1 and Cr-2 photochem. generated sulfonic acid, while Cr-3 was photochem. stable. Cr-1 and Cr-2 initiated photo-crosslinking reaction with poly(vinylphenol) (PVP), a copolymer of methacrylic acid and Et methacrylate (P(MAA-EMA)), and poly(7-oxabicyclo[4.1.0]hept-3-yl)methyl p-styrenesulfonate (POHMSS). After irradiation at 254 nm, the Cr-1 or Cr-2/polymer blended film became insol. and the degree of insolubilisation increased with baking at 100-140°. Solubilization due to decrosslinking was observed by baking at higher temps. (150-200°). The crosslinker/POHMSS system showed high efficiency in photo-thermal crosslinking and thermal decrosslinking at high temps.

CC 37-6 (Plastics Manufacture and Processing)

IT 791846-91-8P 791846-92-9P 791846-93-0P 791846-94-1P

791846-96-3P 791846-97-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(thermally degradable diepoxy crosslinkers containing sulfonate ester groups for photo-crosslinking)

IT 791846-94-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(thermally degradable diepoxy crosslinkers containing sulfonate ester groups for photo-crosslinking)

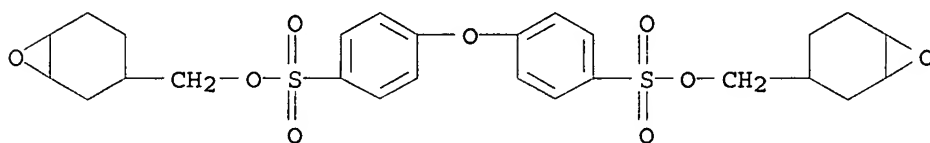
RN 791846-94-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with bis(7-oxabicyclo[4.1.0]hept-3-ylmethyl) 4,4'-oxybis[benzenesulfonate] and ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 791846-89-4

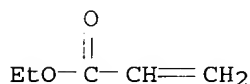
CMF C26 H30 O9 S2



CM 2

CRN 140-88-5

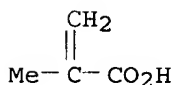
CMF C5 H8 O2



CM 3

CRN 79-41-4

CMF C4 H6 O2



RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 15 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:492719 HCAPLUS

DN 141:62033

TI Cellulose acrylate films for optical uses, their manufacture, and liquid crystal displays and photographic films employing the same

IN Kato, Eiichi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 55 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

PI JP 2004168905 A2 20040617 JP 2002-336954 20021120
 PRAI JP 2002-336954 20021120

AB Cellulose acylate dopes containing photopolymn. macromol. initiators TL1D1(OE1OCOE2CO)nR1 or TL2D2(OCE1CO2E2O)nR2 [T = dithiocarbamate, xanthato; L1, L2 = bivalent bridging group; E1, E2 = bivalent aliphatic and/or aromatic group; D1 = CH2, CO; D2 = O, NH; R1 = OH, OR5, NR6R7 (R5 = C1-12 hydrocarbyl; R6, R7 = H, C1-12 hydrocarbyl); R2 = H, C1-12 hydrocarbyl, COR8, CONHR9 (R8, R9 = C1-12 hydrocarbyl)], and radical monomers are cast and exposed to light to form the claimed films. The dopes may contain light-stable monomers and multifunctional monomers. LCD employing the films are also claimed. Photog. films having supports comprising 30-250-µm-thick films obtained as above, are further claimed. The films show improved flexural strength, storage stability, transparency, and tear strength.

IC ICM C08F002-44
 ICS C08F002-50; C08F251-02; C08J005-18; G02B005-30; G03C001-795;
 C08L001-12

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 38, 73

IT 79-41-4DP, Methacrylic acid, diblock polymers 80-62-6DP, Methyl methacrylate, diblock polymers 105-08-8DP, 1,4-Cyclohexanedimethanol, diblock polymers 108-30-5DP, Succinic anhydride, diblock polymers 3066-71-5DP, diblock polymers 3971-31-1DP, 1,3-Cyclohexanedicarboxylic acid, diblock polymers 676353-20-1DP, diblock polymers 708212-12-8P 708212-14-0P 708212-15-1P 708212-16-2P 708212-17-3P 708212-18-4P 708212-19-5P 708212-20-8P 708212-21-9P 708212-22-0P 708212-23-1P 708212-24-2P 708212-25-3P 708212-26-4P 708212-28-6P 708212-29-7P 708212-30-0P 708212-31-1P 708212-32-2P 708212-33-3P 708212-34-4P 708212-35-5P 708212-38-8P 708212-40-2P 708212-43-5P 708212-45-7P 708274-97-9P, 1,6-Hexanediol-glutaric anhydride-methyl methacrylate diblock copolymer 708275-31-4P 708275-33-6P 708275-34-7P 708275-35-8P

RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(tear-resistant cellulose acylate films containing radically-polymerized block copolymers for optical uses)

IT 708212-38-8P
 RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(tear-resistant cellulose acylate films containing radically-polymerized block copolymers for optical uses)

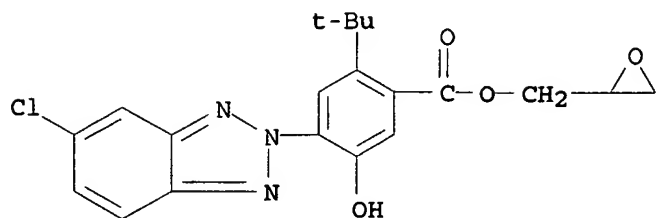
RN 708212-38-8 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-acetic acid, 1,6-hexanediyl ester, polymer with dihydro-2,5-furandione, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl)oxy]]bis[ethanol], 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate and oxiranylmethyl 4-(5-chloro-2H-benzotriazol-2-yl)-2-(1,1-dimethylethyl)-5-hydroxybenzoate, diblock (9CI) (CA INDEX NAME)

CM 1

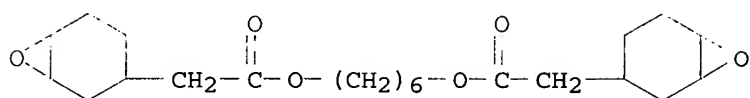
CRN 708212-37-7

CMF C20 H20 Cl N3 O4



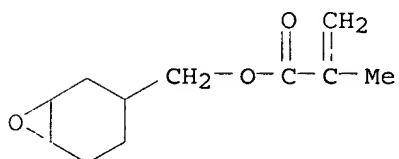
CM 2

CRN 708212-36-6
CMF C22 H34 O6



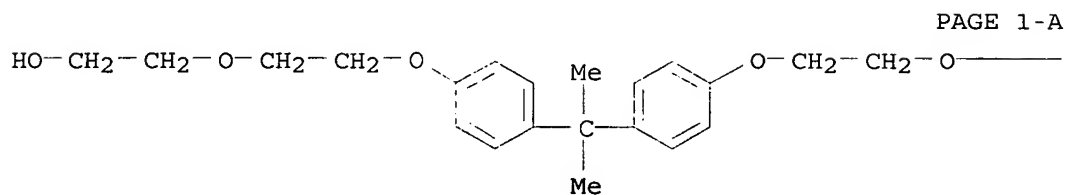
CM 3

CRN 82428-30-6
CMF C11 H16 O3



CM 4

CRN 27697-57-0
CMF C23 H32 O6



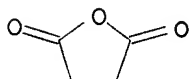
PAGE 1-B

—CH₂—CH₂—OH

CM 5

CRN 108-30-5

CMF C4 H4 O3



L39 ANSWER 16 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:929728 HCAPLUS

DN 139:397078

TI Actinic ray-curable nonaqueous inks with high water and scratch resistance and jet-printing method for reducing curing energy by using them

IN Sasa, Nobumasa

PA Konica Minolta Holdings Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003335991	A2	20031128	JP 2002-147563	20020522
PRAI	JP 2002-147563		20020522		

AB The nonaq. inks contain microgels having radically or cationically polymerizable groups at surfaces. Thus, 2-ethylhexyl acrylate and hexamethylene glycol diacrylate was copolymd. in the presence of an emulsifier [prepared by reaction of N,N-dimethylaminoethyl methacrylate-n-lauryl methacrylate copolymer with glycidyl methacrylate (GMA)] and reacted with GMA to give a reactive microgel, which was mixed with phenoxyethyl acrylate and other additives to give a nonaq. ink, showing viscosity 30 and 31.2 mPa-s, initially and after 1-wk storage at 50°, resp., energy for tack free 20 mJ/cm² by UV irradiation. A printed layer from the ink showed good adhesiveness and high resistance to water and scratching.

IC ICM C09D011-00

ICS B41J002-01; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 74

IT Polyethers, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic-epoxy-polyester-; UV-curable nonaq. inks containing radically/cationically polymerizable microgels for reducing curing energy and high water and scratch resistance)

IT Polyesters, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic-epoxy-polyether-; UV-curable nonaq. inks containing

radically/cationically polymerizable microgels for reducing curing energy and high water and scratch resistance)

IT Epoxy resins, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic-polyester-~~polyether~~-; UV-curable nonaq. inks containing radically/cationically polymerizable microgels for reducing curing energy and high water and scratch resistance)

IT 626421-70-3P 626421-76-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(comprised of actual and assumed monomers; UV-curable nonaq. inks containing radically/cationically polymerizable microgels for reducing curing energy and high water and scratch resistance)

IT 626421-70-3P 626421-76-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(comprised of actual and assumed monomers; UV-curable nonaq. inks containing radically/cationically polymerizable microgels for reducing curing energy and high water and scratch resistance)

RN 626421-70-3 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with 1,4-butanediyl di-2-propenoate, ethenylbenzenesulfonic acid, ethyl 2-propenoate, methyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 3,3'-[oxybis(methylene)]bis[3-ethyloxetane] (9CI) (CA INDEX NAME)

CM 1

CRN 26914-43-2

CMF C8 H8 O3 S

CCI IDS



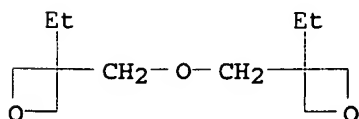
D1- CH=CH₂

D1- SO₃H

CM 2

CRN 18934-00-4

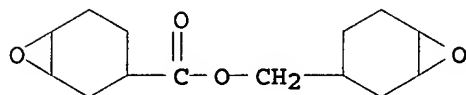
CMF C12 H22 O3



CM 3

CRN 2386-87-0

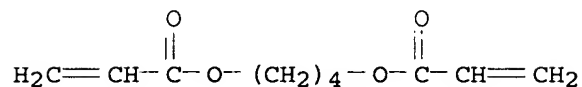
CMF C14 H20 O4



CM 4

CRN 1070-70-8

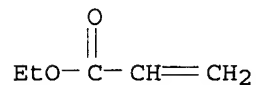
CMF C10 H14 O4



CM 5

CRN 140-88-5

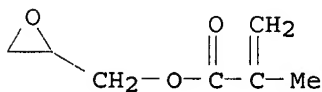
CMF C5 H8 O2



CM 6

CRN 106-91-2

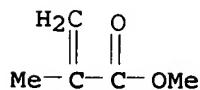
CMF C7 H10 O3



CM 7

CRN 80-62-6

CMF C5 H8 O2



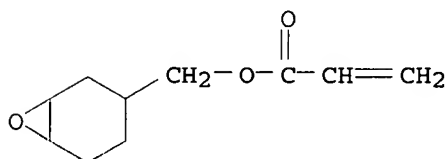
RN 626421-76-9 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with 1,4-butanediyl di-2-propenoate, ethenylbenzenesulfonic acid, ethyl 2-propenoate, methyl 2-methyl-2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate and 3,3'-[oxybis(methylene)]bis[3-ethyloxetane] (9CI) (CA INDEX NAME)

CM 1

CRN 64630-63-3

CMF C10 H14 O3



CM 2

CRN 26914-43-2

CMF C8 H8 O3 S

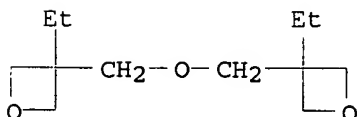
CCI IDS

D1- CH=CH₂D1- SO₃H

CM 3

CRN 18934-00-4

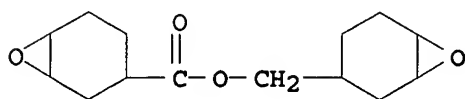
CMF C12 H22 O3



CM 4

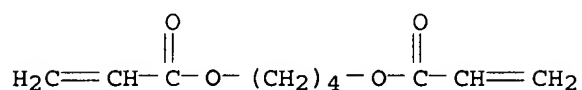
CRN 2386-87-0

CMF C14 H20 O4



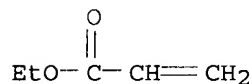
CM 5

CRN 1070-70-8
CMF C10 H14 O4



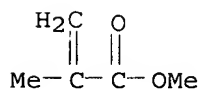
CM 6

CRN 140-88-5
CMF C5 H8 O2



CM 7

CRN 80-62-6
CMF C5 H8 O2



L39 ANSWER 17 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:902627 HCAPLUS

DN 139:401613

TI Photo-hardenable material composition for manufacturing black matrix and color filters of optical imaging devices such as liquid crystal display, digital camera

IN Yoshimoto, Yasufumi

PA Fujifilm Arch Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 29 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

KIND

DATE

APPLICATION NO.

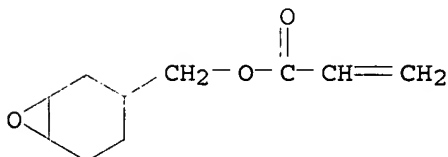
DATE

PI JP 2003330186 A2 20031119 JP 2002-137180 20020513
 PRAI JP 2002-137180 20020513
 AB The title composition contains an alkali-solubilizable resin, a photopolymerization initiator, and a solvent, wherein the resin has substituents with an ether bond at the ends of the main chain. The composition generates coating layer, which shows homogeneous layer thickness and good curing characteristics.
 ICM G03F007-032
 ICS C08F299-04; C08G063-676; G02B005-20; G02F001-1335; G03F007-004; G03F007-027
 CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35
 IT 65697-21-4P, Benzyl methacrylate/methacrylic acid copolymer
 322447-98-3P, Benzyl methacrylate-methacrylic acid-Allyl glycidyl ether copolymer 625825-42-5P, Ripoxy SP 1507-Benzophenonetetracarboxylic acid dianhydride-Neoallyl P 30M copolymer 625825-43-6P, Hydrogenated bisphenol A-Benzophenonetetracarboxylic acid dianhydride-Pentaerythritol triallyl ether copolymer 625825-44-7P, Hydrogenated bisphenol A-Benzophenonetetracarboxylic acid dianhydride-Pentaerythritol tribenzyl ether copolymer 625825-45-8P, Benzyl methacrylate-methacrylic acid-Allyl glycidyl ether-(3,4-Epoxy cyclohexyl)methyl acrylate copolymer 625825-46-9P, Ripoxy SP 1507-Hexamethylene diisocyanate-Pentaerythritol triallyl ether copolymer 625825-48-1P, Ripoxy SP 1507-Benzophenonetetracarboxylic acid dianhydride-phthalic acid dianhydride copolymer 625825-50-5P, Hexamethylene diisocyanate-pentaerythritol triacrylate-Pentaerythritol triallyl ether copolymer 625825-52-7P, Benzophenonetetracarboxylic acid dianhydride-pentaerythritol triacrylate-Pentaerythritol triallyl ether copolymer
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (resin in photo-hardenable material composition)
 IT 625825-45-8P, Benzyl methacrylate-methacrylic acid-Allyl glycidyl ether-(3,4-Epoxy cyclohexyl)methyl acrylate copolymer
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (resin in photo-hardenable material composition)
 RN 625825-45-8 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate, phenylmethyl 2-methyl-2-propenoate and [(2-propenyloxy)methyl]oxirane (9CI) (CA INDEX NAME)

CM 1

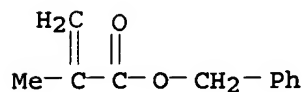
CRN 64630-63-3

CMF C10 H14 O3



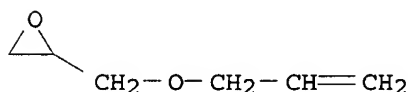
CM 2

CRN 2495-37-6
CMF C11 H12 O2



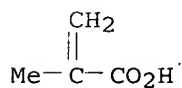
CM 3

CRN 106-92-3
CMF C6 H10 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2



L39 ANSWER 18 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:818484 HCAPLUS
DN 139:330323
TI Novel **polyether** compounds containing acid groups and unsaturated groups and processes for producing the same and resin compositions
IN Okazaki, Akira; Miyake, Hiroto
PA Daicel Chemical Industries, Ltd., Japan
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

Applicants

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003085028	A1	20031016	WO 2003-JP4195	20030402
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003236339	A1	20031020	AU 2003-236339	20030402

EP 1496077	A1	20050112	EP 2003-745885	20030402
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1646600	A	20050727	CN 2003-807509	20030402
US 2005228162	A1	20051013	<u>US 2004-510035</u>	20041001
PRAI JP 2002-103070	A	20020404		
WO 2003-JP4195	W	20030402		

AB The title compds. have cyclohexyl rings, ≥ 2 (meth)acryloyloxy groups, and ≥ 1 carboxylic acid group, and resins therefrom are suitable for use in resists, printed wiring boards, and cured articles. Thus, Cyclomer A 200 was ring-opened with trimethylolpropane in the presence of BF₃ etherate to give a polyacrylate, esterified with tetrahydrophthalic anhydride, mixed (50 parts) with 100 parts ACA 200, coated, and cured with UV.

IC ICM C08G065-26
ICS C08G065-332; C08F290-14; C08F299-02; G03F007-027; G03F007-038

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 37

ST polyepoxycyclohexylmethyl acrylate trimethylolpropane ether hydrophthalate polymer resist; ring opening polymn epoxycyclohexylmethyl acrylate trimethylolpropane; polyether acrylate hydrophthalate ester

IT Esterification
Photoresists
UV radiation
(curable polyethers containing acid groups and unsatd. groups for resists and circuit boards and cured articles)

IT Polyethers, reactions
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(curable polyethers containing acid groups and unsatd. groups for resists and circuit boards and cured articles)

IT Anhydrides
Epoxides
RL: RCT (Reactant); RACT (Reactant or reagent)
(curable polyethers containing acid groups and unsatd. groups for resists and circuit boards and cured articles)

IT Crosslinking
(photochem.; curable polyethers containing acid groups and unsatd. groups for resists and circuit boards and cured articles)

IT Polymerization
(ring-opening; curable polyethers containing acid groups and unsatd. groups for resists and circuit boards and cured articles)

IT 613257-67-3P 613257-68-4P 613257-69-5P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(curable polyethers containing acid groups and unsatd. groups for resists and circuit boards and cured articles)

IT 524942-82-3P 525597-30-2P 613257-63-9P
613257-64-0P, Poly(3,4-epoxycyclohexylmethyl acrylate)
trimethylolpropane ether tris(hydrogen tetrahydrophthalate)
613257-65-1P, Poly(3,4-epoxycyclohexylmethyl methacrylate)
trimethylolpropane ether 613257-66-2P, Poly(3,4-epoxycyclohexylmethyl methacrylate) trimethylolpropane ether tris(hydrogen tetrahydrophthalate) 613685-96-4P 613686-44-5P 613686-45-6P 613686-46-7P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(curable polyethers containing acid groups and unsatd. groups for resists and circuit boards and cured articles)

IT 77-99-6, Trimethylolpropane 79-10-7, Acrylic acid, reactions 85-43-8,
Tetrahydrophthalic anhydride 64630-63-3, Cyclomer A 200
82428-30-6, Cyclomer M 100

RL: RCT (Reactant); RACT (Reactant or reagent)
(curable **polyethers** containing acid groups and unsatd. groups for
resists and circuit boards and cured articles)

IT 613257-67-3P 613257-68-4P 613257-69-5P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
engineered material use); PREP (Preparation); USES (Uses)

(curable **polyethers** containing acid groups and unsatd. groups for
resists and circuit boards and cured articles)

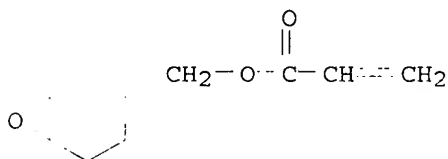
RN 613257-67-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate,
7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate and 7-
oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate homopolymer ether with
2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) tris(hydrogen
4-cyclohexene-1,2-dicarboxylate) (9CI) (CA INDEX NAME)

CM 1

CRN 64630-63-3

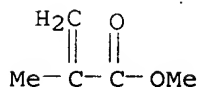
CMF C10 H14 O3



CM 2

CRN 80-62-6

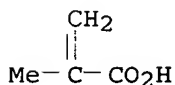
CMF C5 H8 O2



CM 3

CRN 79-41-4

CMF C4 H6 O2



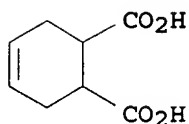
CM 4

CRN 613257-64-0

CMF (C10 H14 O3)x . C8 H10 O4 . 1/3 C6 H14 O3

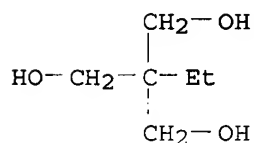
CM 5

CRN 88-98-2
CMF C8 H10 O4



CM 6

CRN 77-99-6
CMF C6 H14 O3

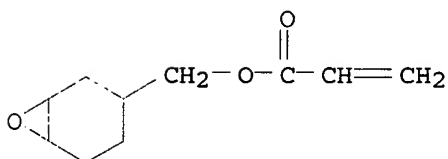


CM 7

CRN 145961-32-6
CMF (C10 H14 O3)x
CCI PMS

CM 8

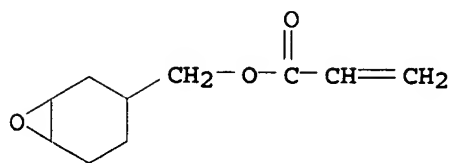
CRN 64630-63-3
CMF C10 H14 O3



RN 613257-68-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate homopolymer mono-2-propenoate (9CI) (CA INDEX NAME)

CM 1

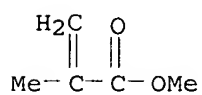
CRN 64630-63-3
CMF C10 H14 O3



CM 2

CRN 80-62-6

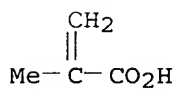
CMF C5 H8 O2



CM 3

CRN 79-41-4

CMF C4 H6 O2



CM 4

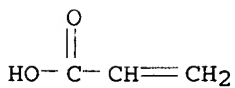
CRN 524942-82-3

CMF (C10 H14 O3)x . C3 H4 O2

CM 5

CRN 79-10-7

CMF C3 H4 O2



CM 6

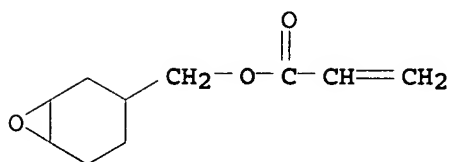
CRN 145961-32-6

CMF (C10 H14 O3)x

CCI PMS

CM 7

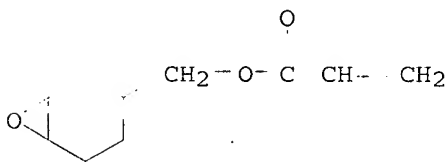
CRN 64630-63-3
CMF C10 H14 O3



RN 613257-69-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate homopolymer ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) tris(hydrogen 4-cyclohexene-1,2-dicarboxylate), and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate (9CI) (CA INDEX NAME)

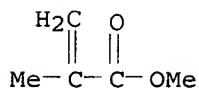
CM 1

CRN 64630-63-3
CMF C10 H14 O3



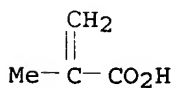
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2

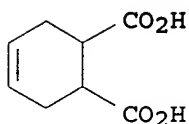


CM 4

CRN 613257-66-2
 CMF (C11 H16 O3)x . C8 H10 O4 . 1/3 C6 H14 O3

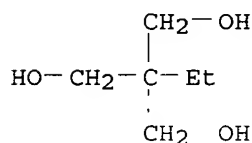
CM 5

CRN 88-98-2
 CMF C8 H10 O4



CM 6

CRN 77-99-6
 CMF C6 H14 O3

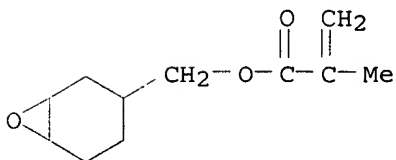


CM 7

CRN 128703-08-2
 CMF (C11 H16 O3)x
 CCI PMS

CM 8

CRN 82428-30-6
 CMF C11 H16 O3



IT 524942-82-3P 613257-63-9P 613257-64-0P,
 Poly(3,4-epoxycyclohexylmethyl acrylate) trimethylolpropane ether
 tris(hydrogen tetrahydrophthalate) 613257-65-1P,
 Poly(3,4-epoxycyclohexylmethyl methacrylate) trimethylolpropane ether
 613257-66-2P, Poly(3,4-epoxycyclohexylmethyl methacrylate)
 trimethylolpropane ether tris(hydrogen tetrahydrophthalate)
 RL: IMF (Industrial manufacture); RCT (Reactant); **PREP**
 (**Preparation**); RACT (Reactant or reagent)
 (curable **polyethers** containing acid groups and unsatd. groups for

resists and circuit boards and cured articles)

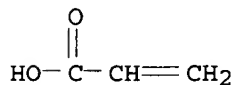
RN 524942-82-3 HCAPLUS

CN 2-Propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer, mono-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7

CMF C3 H4 O2



CM 2

CRN 145961-32-6

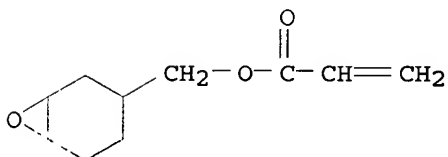
CMF (C10 H14 O3)x

CCI PMS

CM 3

CRN 64630-63-3

CMF C10 H14 O3



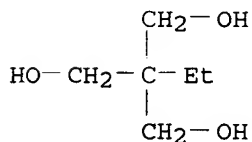
RN 613257-63-9 HCAPLUS

CN 2-Propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (9CI) (CA INDEX NAME)

CM 1

CRN 77-99-6

CMF C6 H14 O3



CM 2

CRN 145961-32-6

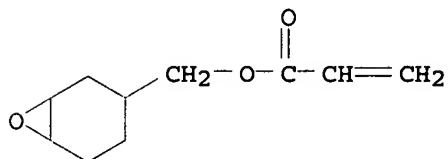
CMF (C10 H14 O3)x

CCI PMS

CM 3

CRN 64630-63-3

CMF C10 H14 O3



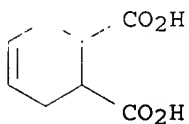
RN 613257-64-0 HCAPLUS

CN 2-Propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), tris(hydrogen 4-cyclohexene-1,2-dicarboxylate) (9CI) (CA INDEX NAME)

CM 1

CRN 88-98-2

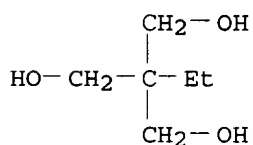
CMF C8 H10 O4



CM 2

CRN 77-99-6

CMF C6 H14 O3



CM 3

CRN 145961-32-6

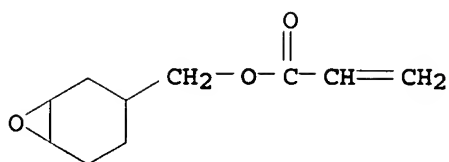
CMF (C10 H14 O3) x

CCI PMS

CM 4

CRN 64630-63-3

CMF C10 H14 O3



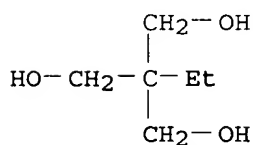
RN 613257-65-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester,
homopolymer, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 77-99-6

CMF C6 H14 O3



CM 2

CRN 128703-08-2

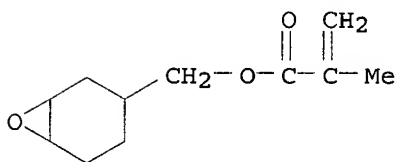
CMF (C11 H16 O3)x

CCI PMS

CM 3

CRN 82428-30-6

CMF C11 H16 O3



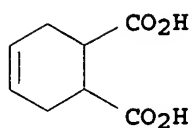
RN 613257-66-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester,
homopolymer, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1),
tris(hydrogen 4-cyclohexene-1,2-dicarboxylate) (9CI) (CA INDEX NAME)

CM 1

CRN 88-98-2

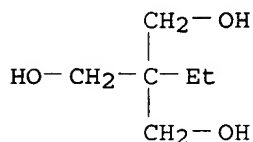
CMF C8 H10 O4



CM 2

CRN 77-99-6

CMF C6 H14 O3



CM 3

CRN 128703-08-2

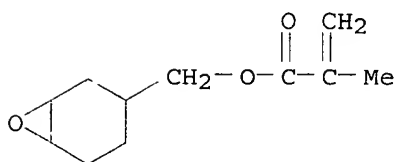
CMF (C11 H16 O3)x

CCI PMS

CM 4

CRN 82428-30-6

CMF C11 H16 O3



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 19 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:809380 HCAPLUS
 DN 139:308580
 TI Storage-stable photoimaging resin compositions for electric insulators and their laminates
 IN Inaba, Shinji; Takeda, Toru; Kawasato, Hironobu
 PA Nippon Steel Chemical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 2003292576 A2 20031015 JP 2002-101555 20020403
 PRAI JP 2002-101555 20020403

AB The compns., useful for solder resists, interlayer insulators, etc., comprise (A) carboxy-containing polymers with Mw 3000-40,000 and acid value 5-200 mgKOH/g manufactured by polymerizing diols and polycarboxylic acids and esterifying some of their carboxy groups with monofunctional epoxy compds., (B) compds. having ≥ 1 photopolymerizable unsatd. bonds, (C) 2-30 parts (based on A + B = 100) epoxy compds., and (D) 0.1-15 parts (based on A + B = 100) photoinitiators. Thus, a composition comprising fluorene epoxy diacrylate (ASF 400)-biphenyltetracarboxylic dianhydride copolymer ester with a monoepoxy compds. (YED 122), trimethylolpropane triacrylate, an epoxy resin (Epikote 834), and photoinitiator was applied on a substrate, imagewise UV-exposed, alkali-developed, and heat-cured to give a dielec. film showing high resolution even after storing the composition

for

15 days.

IC ICM C08G059-42
 ICS B32B027-38

CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 74, 76

IT 122-60-1DP, Phenol glycidyl ether, alkyl derivs., esters with carboxy-containing polyesters 610800-31-2P 610800-32-3P 611209-38-2P 611209-44-0P, ASF 400-biphenyltetracarboxylic anhydride-tetrahydrophthalic anhydride copolymer ester with YED 122 611209-47-3P, ASF 400-biphenyltetracarboxylic dianhydride copolymer ester with cyclohexene oxide 611209-48-4P, ASF 400-biphenyltetracarboxylic anhydride-tetrahydrophthalic anhydride copolymer ester with cyclohexene oxide
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(storage-stable photoimaging acrylic polyester compns. for elec. insulators)

IT 610800-31-2P 610800-32-3P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

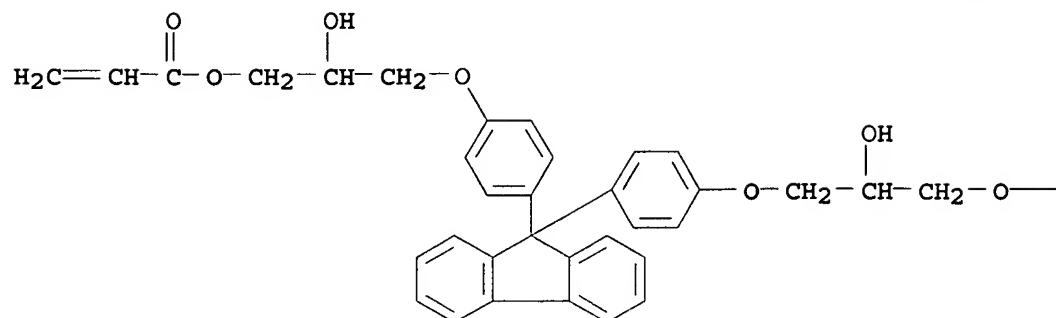
(storage-stable photoimaging acrylic polyester compns. for elec. insulators)

RN 610800-31-2 HCAPLUS
 CN 2-Propenoic acid, 9H-fluoren-9-ylidenebis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester, polymer with [5,5'-biisobenzofuran]-1,1',3,3'-tetrone and 3-ethenyl-7-oxabicyclo[4.1.0]heptane (9CI) (CA INDEX NAME)

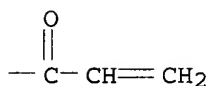
CM 1

CRN 143182-97-2
 CMF C37 H34 O8

PAGE 1-A



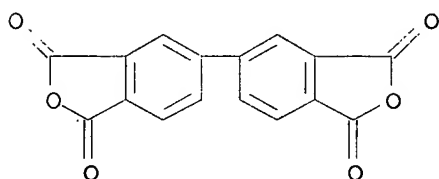
PAGE 1-B



CM 2

CRN 2420-87-3

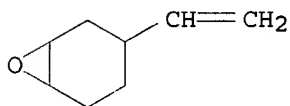
CMF C16 H6 O6



CM 3

CRN 106-86-5

CMF C8 H12 O



RN 610800-32-3 HCAPLUS

CN 2-Propenoic acid, 9H-fluoren-9-ylidenebis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester, polymer with [5,5'-biisobenzofuran]-1,1',3,3'-tetrone, 3-ethenyl-7-oxabicyclo[4.1.0]heptane and 3a,4,7,7a-tetrahydro-1,3-

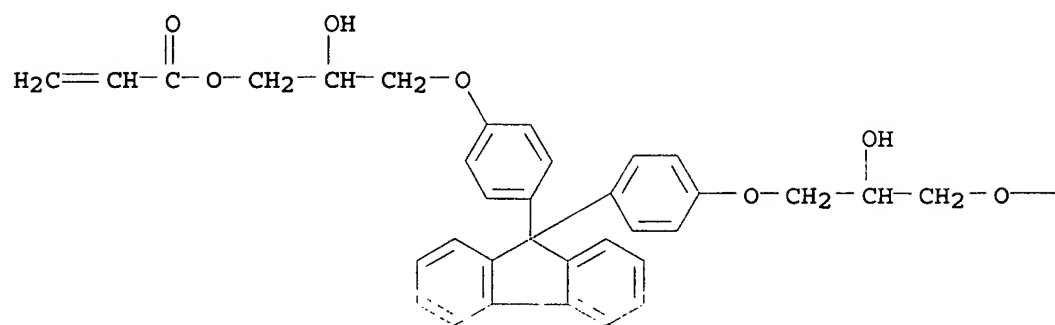
isobenzofurandione (9CI) (CA INDEX NAME)

CM 1

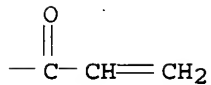
CRN 143182-97-2

CMF C37 H34 O8

PAGE 1-A



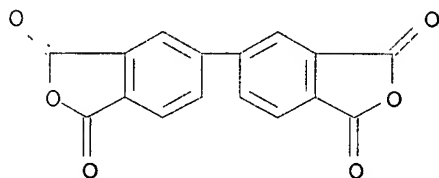
PAGE 1-B



CM 2

CRN 2420-87-3

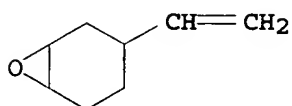
CMF C16 H6 O6



CM 3

CRN 106-86-5

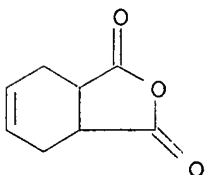
CMF C8 H12 O



CM 4

CRN 85-43-8

CMF C8 H8 O3



L39 ANSWER 20 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:750773 HCAPLUS

DN 139:261816

TI Epoxy resin-based photopolymer composition and the printed circuit board therewith

IN Shiramizu, Kohei; Inomata, Toshie; Kawamoto, Kenji

PA Toppan Printing Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003268076	A2	20030925	JP 2002-73743	20020318
PRAI	JP 2002-73743		20020318		

AB Title composition with high sensitivity, high resolution, elec. insulation, thermo-impact resistance, and heat resistance comprises at least, (A) polyfunctional epoxy resin, (B) unsatd. group-containing polycarboxylic acid prepared from reaction product of epoxy compound and (meth)acrylic acid, carboxylic acid or its anhydride, (C) reactive diluent containing (meth)acryloyl and epoxy groups, and (D) photopolymer. initiator, wherein the ratio of the thermo-curing site number in A-C (a) to the total photo-curing site number (b) satisfied the equation of $a/b \geq 0.5$. Thus, a composition comprising TMH 574 14, a compound prepared from Ripoxy VR

90

and phthalic anhydride 37, Epolead M 100 14, Irgacure 907 3, diethylthioxanthone 0.5 part, and other additives was spin-coated on a copper substrate to form a photosensitive layer with thickness 30 μm for testing, showing photosensitivity 7, resolution 50, glass temperature 153°, a/b 1.2, and good drying ability, elec. insulation, adhesion, solder heat-resistance, and crack-resistance.

IC ICM C08G059-42

ICS B32B027-38; H05K003-28

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 76

IT 601484-86-0P 601488-13-5P, Epolead M 100-Ripoxy VR 90

phthalate-TMH 574 copolymer **601488-14-6P**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)

(preparation of epoxy resin-based photopolymer composition for printed circuit board)

IT **601484-86-0P 601488-13-5P**, Epolead M 100-Ripoxy VR 90

phthalate-TMH 574 copolymer **601488-14-6P**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)

(preparation of epoxy resin-based photopolymer composition for printed circuit board)

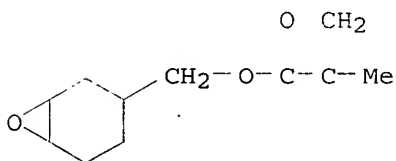
RN 601484-86-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with ACA 200M and 2,2',2''-[methylidynetris(phenyleneoxymethylene)]tris[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 82428-30-6

CMF C11 H16 O3

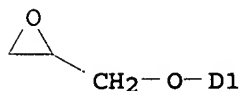
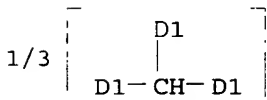


CM 2

CRN 66072-38-6

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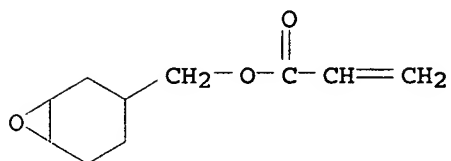
CCI IDS



CM 3

CRN 64630-63-3

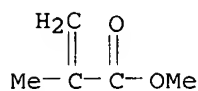
CMF C10 H14 O3



CM 4

CRN 80-62-6

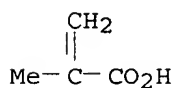
CMF C5 H8 O2



CM 5

CRN 79-41-4

CMF C4 H6 O2



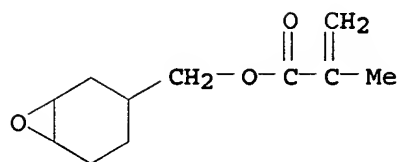
RN 601488-13-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer hydrogen 1,2-benzenedicarboxylate di-2-propenoate and 2,2',2''-[methylidynetris(phenyleneoxymethylene)]tris[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 82428-30-6

CMF C11 H16 O3

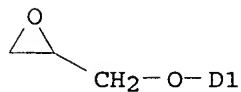
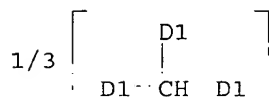


CM 2

CRN 66072-38-6

CMF C28 H28 O6

CCI IDS



CM 3

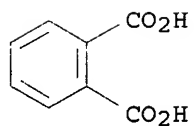
CRN 251653-45-9

CMF (C21 H24 O4)x . x C8 H6 O4 . 2 C3 H4 O2

CM 4

CRN 88-99-3

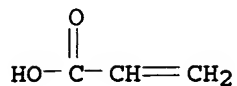
CMF C8 H6 O4



CM 5

CRN 79-10-7

CMF C3 H4 O2

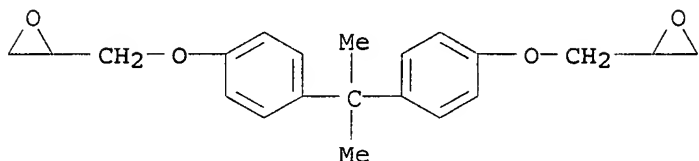


CM 6

CRN 25085-99-8
CMF (C21 H24 O4)x
CCI PMS

CM 7

CRN 1675-54-3
CMF C21 H24 O4



RN 601488-14-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester,
polymer with 2,2'-[(1-methylethylidene)bis(4,1-
phenyleneoxymethylene)]bis[oxirane] homopolymer hydrogen
1,2-benzenedicarboxylate di-2-propenoate and NC 7000L (9CI) (CA INDEX
NAME)

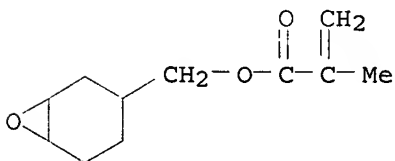
CM 1

CRN 233761-52-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 82428-30-6
CMF C11 H16 O3

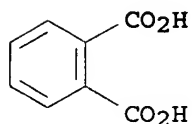


CM 3

CRN 251653-45-9
CMF (C21 H24 O4)x . x C8 H6 O4 . 2 C3 H4 O2

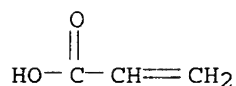
CM 4

CRN 88-99-3
CMF C8 H6 O4



CM 5

CRN 79-10-7
CMF C3 H4 O2

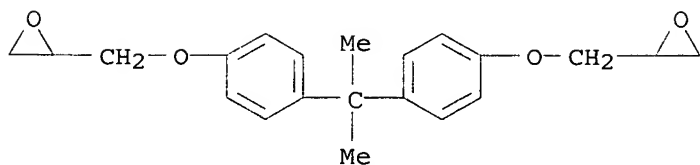


CM 6

CRN 25085-99-8
CMF (C21 H24 O4)x
CCI PMS

CM 7

CRN 1675-54-3
CMF C21 H24 O4



L39 ANSWER 21 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:506812 HCAPLUS
DN 139:86734
TI Oxide-containing particles, their compositions, and their protective coatings for optical devices
IN Yamada, Yoshitaka; Baba, Atsushi; Takatori, Masashige; Tanba, Kazuaki
PA JSR Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003183537	A2	20030703	JP 2001-385003	20011218
	TW 225881	B1	20050101	TW 2002-91124109	20021018
	CN 1427043	A	20030702	CN 2002-157900	20021218
PRAI	JP 2001-385003	A	20011218		

AB The comps. comprise (A) particles prepared by reaction of (a) ≥ 1 element oxide particle chosen from Si, Al, Zr, Ti, Zn, Ge, In, Sn, Sb, and Ce and (b) ≥ 1 compound chosen from $[R1X(CH2)mO(CH2)n]qSiR2rR34-q-r$, $[R1X(CH2)mO(CH2)nO(CH2)p]qSiR2rR34-q-r$, $(YR4)qSiR2rR34-q-r$, and $(GR4)qSiR2rR34-q-r$ [X = oxetane; Y = 3,4-epoxycyclohexyl; G = glycidyl; R1 = H, alkyl, F, fluoroalkyl, allyl, aryl, furyl, ethynyl; R2 = hydrolyzable group; R3 = alkyl; R4 = divalent organic group; m, n, p = 1-10; q, r = 1-3; (q + r) ≤ 4], (B) copolymers prepared from (c) epoxy-containing unsatd. compds. and (d) olefin-based unsatd. compds., and (C) other cationically polymerizable compds. Thus, a composition containing (A) 40 parts particles prepared

by reaction of MEK ST (silica sol) and Sila-Ace S 510 (γ -glycidoxypropyltrimethoxysilane), (B) 100 parts glycidyl methacrylate-styrene copolymer, (C) 10 parts Epikote 157S65 (bisphenol A novolak epoxy resin), and (D) 35 parts trimellitic anhydride was applied on a glass plate and baked to give a coating with high transparency, improved adhesion, and pencil hardness 6H.

IC ICM C09C001-00
ICS C08K005-151; C08K009-06; C08L101-06; C09C003-12; C09D007-12; C09D133-00; C09D201-06; G02F001-1333

CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 38, 73

ST silica glycidoxypropyl methoxysilane particle protective coating; glycidyl methacrylate styrene bisphenol novolak epoxy resin; trimellitic anhydride crosslinking coating optical device

IT 552867-39-7P 552867-40-0P 552867-41-1P 552867-42-2P
552867-43-3P 552867-44-4P 552867-45-5P 552867-46-6P
552867-47-7P 552867-48-8P 552867-49-9P 552867-50-2P
552867-51-3P 552867-52-4P 552889-24-4P 552889-25-5P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(protective coatings containing oxide-containing particles of optical devices)

IT 552867-43-3P 552867-48-8P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(protective coatings containing oxide-containing particles of optical devices)

RN 552867-43-3 HCAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, polymer with Epikote 157S65, ethenylbenzene, oxiranylmethyl 2-methyl-2-propenoate, silica and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 137598-82-4

CMF Unspecified

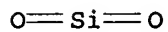
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7631-86-9

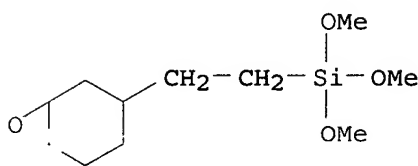
CMF 02 Si



CM 3

CRN 3388-04-3

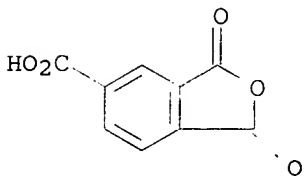
CMF C11 H22 O4 Si



CM 4

CRN 552-30-7

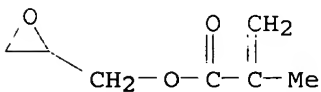
CMF C9 H4 O5



CM 5

CRN 106-91-2

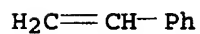
CMF C7 H10 O3



CM 6

CRN 100-42-5

CMF C8 H8



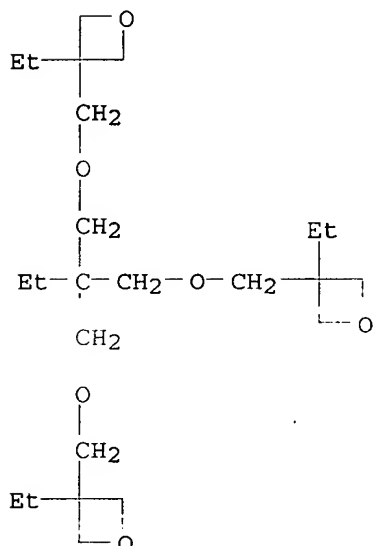
RN 552867-48-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1-cyclohexyl-1H-pyrrole-2,5-dione, ethenylbenzene, 3,3'-[[2-ethyl-2-[[3-ethyl-3-oxetanyl)methoxy)methyl]-1,3-propanediyl]bis(oxymethylene)]bis[3-ethyloxetane], oxiranylmethyl 2-methyl-2-propenoate, silica and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 180423-87-4

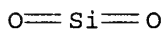
CMF C24 H44 O6



CM 2

CRN 7631-86-9

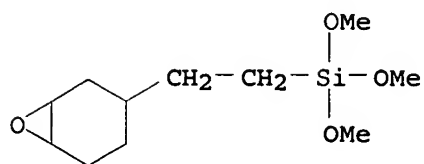
CMF O2 Si



CM 3

CRN 3388-04-3

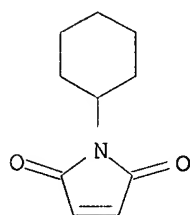
CMF C11 H22 O4 Si



CM 4

CRN 1631-25-0

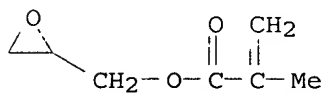
CMF C10 H13 N O2



CM 5

CRN 106-91-2

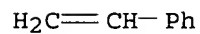
CMF C7 H10 O3



CM 6

CRN 100-42-5

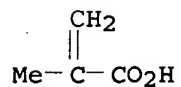
CMF C8 H8



CM 7

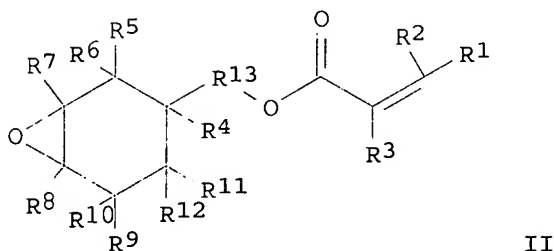
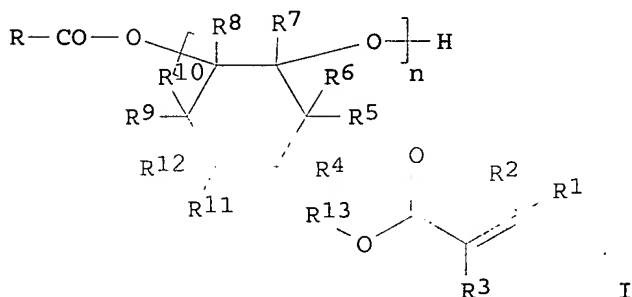
CRN 79-41-4

CMF C4 H6 O2



L39 ANSWER 22 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:390014 HCAPLUS
 DN 138:386279
 TI (Meth)acrylate-containing **polyethers**, their resin compositions,
 their radiation-cured products with balanced flexibility and hardness and
 good solvent resistance, and manufacture of them
 IN Okazaki, Akira
 PA Daicel Chemical Industries, Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003147072	A2	20030521	JP 2002-257308	20020903
PRAI	JP 2001-266032	A	20010903		
GI					



AB The **polyethers** I [R1, R2 = H; R3 = H, Me; R4-12 = Me, Et, Pr;
 R13 = (CH2)n2 (maybe substituted by Me, Et, Pr),
 (CH2OCOCH2CH2CH2CH2)n3, (CH2OCOCH2CH2CH2CH2)n3, (CH2OCOCH2CHMeCH2CH2)n3;
 n2 = 1-6; n3 = 1-10; n = 3-50], useful for coatings, inks, adhesives,
 etc., are manufactured by reacting R(CO2H)n1 with mol. weight 46-3000 (R = H,
 organic compound residue; n1 = 1-30) and compds. II (R1-13, n2, n3 = same as above).
 Thus, 3,4-epoxycyclohexylmethyl acrylate (A 200) and acrylic acid were
 reacted to give a **polyether** acrylate, which was UV-cured to show
 pencil hardness 5H, good curability, and no tack.
 IC ICM C08G065-14
 CC 37-3 (Plastics Manufacture and Processing)
 ST **polyether** acrylate UV curability epoxycyclohexylmethyl
 methacrylate; flexibility radiation curable polyoxyalkylene acrylate compn
 IT Polyoxyalkylenes, preparation

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

((meth)acrylate-containing polyethers for radiation-cured products with balanced flexibility and hardness and good solvent resistance)

IT Polyoxyalkylenes, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic; (meth)acrylate-containing polyethers for radiation-cured products with balanced flexibility and hardness and good solvent resistance)

IT 524942-82-3P, 3,4-Epoxy cyclohexylmethyl acrylate homopolymer monoacrylate
524942-87-8P, 3,4-Epoxy cyclohexylmethyl methacrylate homopolymer monomethacrylate
524942-91-4P, 3,4-Epoxy cyclohexylmethyl acrylate homopolymer monomethacrylate
524942-94-7P, 3,4-Epoxy cyclohexylmethyl acrylate homopolymer maleate (2:1) 525597-30-2P
525598-13-4P 525598-18-9P 525598-26-9P

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

((meth)acrylate-containing polyethers for radiation-cured products with balanced flexibility and hardness and good solvent resistance)

IT 524942-85-6P, 3,4-Epoxy cyclohexylmethyl acrylate homopolymer monoacrylate homopolymer
524942-89-0P, 3,4-Epoxy cyclohexylmethyl methacrylate homopolymer monomethacrylate homopolymer
524942-92-5P, 3,4-Epoxy cyclohexylmethyl acrylate homopolymer monomethacrylate homopolymer
524942-96-9P, 3,4-Epoxy cyclohexylmethyl acrylate homopolymer, sru, maleate (2:1), homopolymer
525598-76-9P 525598-77-0P, 3,4-Epoxy cyclohexylmethyl methacrylate homopolymer, sru, monomethacrylate, homopolymer
525598-78-1P, 3,4-Epoxy cyclohexylmethyl acrylate homopolymer, sru, monomethacrylate, homopolymer
525598-79-2P, 3,4-Epoxy cyclohexylmethyl acrylate homopolymer maleate homopolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

((meth)acrylate-containing polyethers for radiation-cured products with balanced flexibility and hardness and good solvent resistance)

IT 524942-94-7P, 3,4-Epoxy cyclohexylmethyl acrylate homopolymer maleate (2:1)

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

((meth)acrylate-containing polyethers for radiation-cured products with balanced flexibility and hardness and good solvent resistance)

RN 524942-94-7 HCAPLUS

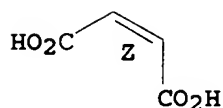
CN 2-Propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer, (2Z)-2-butenedioate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



CM 2

CRN 145961-32-6

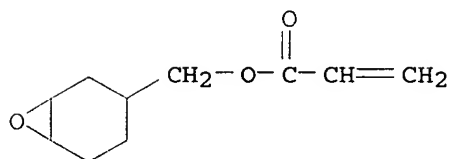
CMF (C10 H14 O3)x

CCI PMS

CM 3

CRN 64630-63-3

CMF C10 H14 O3



IT 524942-96-9P, 3,4-Epoxy cyclohexylmethyl acrylate homopolymer, sru,
maleate (2:1), homopolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
((meth)acrylate-containing polyethers for radiation-cured
products with balanced flexibility and hardness and good solvent
resistance)

RN 524942-96-9 HCAPLUS

CN 2-Propenoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer,
(2Z)-2-butenedioate (2:1), homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 524942-94-7

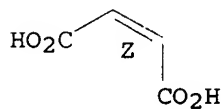
CMF (C10 H14 O3)x . 1/2 C4 H4 O4

CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.

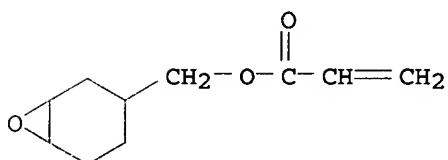


CM 3

CRN 145961-32-6
 CMF (C10 H14 O3)x
 CCI PMS

CM 4

CRN 64630-63-3
 CMF C10 H14 O3



L39 ANSWER 23 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:68819 HCAPLUS

DN 138:138898

TI UV-curable coating compositions for metallic cans

IN Takami, Seiji; Hidaka, Takahiro

PA Kansai Paint Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

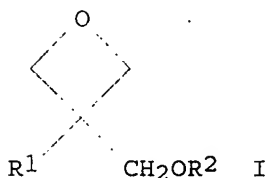
CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003026993	A2	20030129	JP 2001-211485	20010712
	JP 3712960	B2	20051102		
PRAI	JP 2001-211485		20010712		
GI					



AB Title compns., with good adhesion to printing inks and clear coats, contain 100 parts blends of 1-80% oxetanes I [$\text{R}^1 = \text{H}, \text{F}, \text{C1-6}$ (cyclo)alkyl, C1-6 (cyclo) fluoroalkyl, aryl, allyl, aralkyl, furyl, thienyl; $\text{R}^2 = \text{C6-20}$ alkyl or alkenyl] and 20-99% I-excluded cationic polymerizable compds., 0.01-20 parts UV-induced cationic polymerization initiators, and 1-30 parts stearic acid-treated Al powders with average diameter of 1-50 μm . A steel plate was coated with a composition containing 3-ethyl-3-hydroxymethyloxetane 30, 3-ethyl-3-n-octyloxymethyloxetane 10, Cyracure UVR 6110 50, CAT 001 (fatty acid-modified epoxy resin) 10, Cyracure UVI 6990 5, PI 2074 1, and Hi-Print 30T (stearic acid-treated Al flakes) 15 parts, UV-cured to form a metallic film, then printed with an

alkyd resin ink (to cover 50% of metallic film area), totally covered with an aqueous clear containing acrylic styrene resin, and baked at 200° for 2 min to form a clear film showing pencil hardness 3 H initially and after retort treatment (in 125° water, 30 min) and good adhesion before and after retort treatment.

IC ICM C09D171-00

ICS B05D003-06; B05D007-14; B05D007-24; C08G065-18; C09D005-00;
C09D163-00; C09D163-08; C09D201-06

CC 42-10 (Coatings, Inks, and Related Products)

IT **Polyethers, uses**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(epoxy; UV-curable metallic oxetane/epoxy resin coatings with good adhesion to inks and clear topcoats for metal cans)

IT Epoxy resins, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polyether-; UV-curable metallic oxetane/epoxy resin coatings with good adhesion to inks and clear topcoats for metal cans)

IT 2386-87-0DP, (3,4-Epoxy cyclohexyl)methyl 3,4-epoxycyclohexanecarboxylate, polymers with epoxidized polybutadiene and 3-ethyl-3-dodecyloxymethyl oxetane 9003-17-2DP, Polybutadiene, epoxidized, polymers with 3-ethyl-3-dodecyloxymethyl oxetane and (3,4-epoxycyclohexyl)methyl 3,4-epoxycyclohexanecarboxylate 298695-61-1P 403648-79-3DP, polymers with epoxidized polybutadiene and (3,4-epoxycyclohexyl)methyl 3,4-epoxycyclohexanecarboxylate 491608-77-6P 491851-56-0P 491851-57-1P 491851-58-2P 491851-59-3P 491851-61-7P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(UV-curable metallic oxetane/epoxy resin coatings with good adhesion to inks and clear topcoats for metal cans)

IT 77-99-6DP, Trimethylolpropane, polymers with diacid and anhydrides and polyhydric alcs. and linseed oil fatty acids 85-44-9DP, Phthalic anhydride, polymers with diacid and polyhydric alcs. and linseed oil fatty acids 124-04-9DP, Adipic acid, polymers with anhydrides and polyhydric alcs. and linseed oil fatty acids 126-30-7DP, Neopentyl glycol, polymers with diacid and anhydrides and polyhydric alcs. and linseed oil fatty acids

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(printing inks; UV-curable metallic oxetane/epoxy resin coatings with good adhesion to inks and clear topcoats for metal cans)

IT 491608-77-6P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(UV-curable metallic oxetane/epoxy resin coatings with good adhesion to inks and clear topcoats for metal cans)

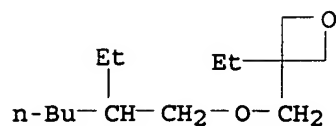
RN 491608-77-6 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with ethenylbenzene, 3-ethyl-3-[(2-ethylhexyl)oxy]methyl oxetane and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

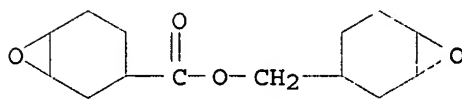
CRN 298695-60-0

CMF C14 H28 O2



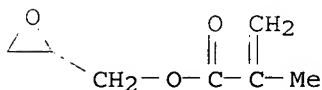
CM 2

CRN 2386-87-0
CMF C14 H20 O4



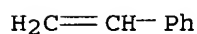
CM 3

CRN 106-91-2
CMF C7 H10 O3



CM 4

CRN 100-42-5
CMF C8 H8



L39 ANSWER 24 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:36569 HCAPLUS

DN 138:91077

TI Thermosetting resin compositions containing multilayer spherical fine particles

IN Ikekuchi, Nobuyuki; Omori, Takafumi

PA Mitsubishi Gas Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003012937	A2	20030115	JP 2001-196226	20010628
PRAI	JP 2001-196226		20010628		

AB Title compns. comprise multilayer spherical fine particles comprising elastic resin layers covered with outer rigid layers. Thus, a composition comprising 2,2-bis(4-cyanatophenyl)propane 15, 2,2-bis(4-cyanatophenyl)propane prepolymer 13, EXA 830LVP (bisphenol F type epoxy resin) 22, DEN 431 (novolak type epoxy resin) 50, ferric acetylacetone 0.08, 2-ethyl-4-methylimidazole 0.10, A 187 coupling agent 2, Staphyloid IM 203 (epoxy-containing glass type resin particle) 15, Staphyloid AC 3355 4, and talc 50 parts was applied on a JTC-LP electrolytic copper foil and a PET film, and dried to give a B-stage copper foil-attached resin sheet (X) and B-stage resin composition sheet (Y), which were used for printed circuit board showing good heat, migration, and crack resistance and elec. properties.

IC ICM C08L101-00

ICS C08K003-00; C08L021-00

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 56, 76

IT 428505-50-4P, 2,2-Bis(4-cyanatophenyl)propane-pyromellitic anhydride-SP 1509 copolymer 483369-99-9P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate for thermosetting resin preparation; preparation of thermosetting

resin compns. containing multilayer spherical fine particles)

IT 372488-70-5P, 2,2-Bis(4-cyanatophenyl)propane-DEN 431-EXA 830LVP copolymer 477946-24-0P 483369-97-7P 483370-01-0P 483370-02-1P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of thermosetting resin compns. containing multilayer spherical

fine

particles)

IT 483370-02-1P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of thermosetting resin compns. containing multilayer spherical

fine

particles)

RN 483370-02-1 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, DEN 439, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 1,1'-(1-methylethylidene)bis[4-isocyanatobenzene] and (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 63957-65-3

CMF Unspecified

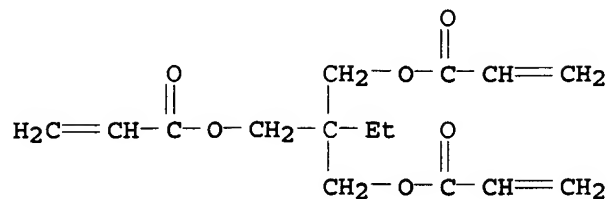
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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CRN 15625-89-5

CMF C15 H20 O6

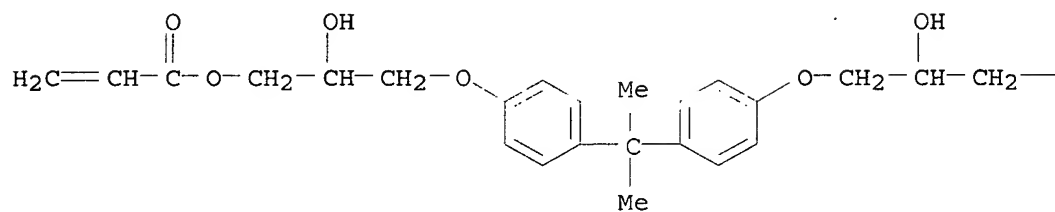


CM 3

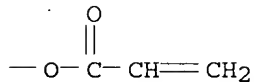
CRN 4687-94-9

CMF C27 H32 O8

PAGE 1-A

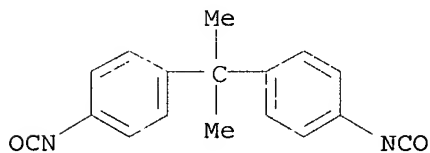


PAGE 1 - B



CM 4

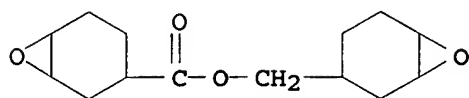
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CMF C17 H14 N2 O2

CM 5

CRN 2386-87-0

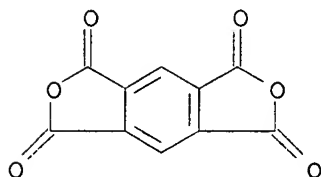
CMF C14 H20 O4



CM 6

CRN 89-32-7

CMF C10 H2 O6



L39 ANSWER 25 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:814209 HCAPLUS

DN 137:326098

TI Photoreactive and photocurable compositions containing hydrolyzable silicone compounds

IN Takahashi, Katsunori; Fukui, Hiroji; Kawabata, Kazuhiro; Kuroda, Takeo; Ichitani, Motokuni; Nakatani, Yasuhiro

PA Sekisui Chemical Co., Ltd., Japan

SO PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002083764	A1	20021024	WO 2002-JP3520	20020409
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	JP 2003213001	A2	20030730	JP 2002-102854	20020404
	CA 2443406	AA	20021024	CA 2002-2443406	20020409
	EP 1391476	A1	20040225	EP 2002-714550	20020409
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	TW 591058	B	20040611	TW 2002-91107029	20020409
	CN 1524104	A	20040825	CN 2002-807951	20020409
	US 2004202956	A1	20041014	US 2004-474376	20040310
PRAI	JP 2001-110138	A	20010409		
	JP 2001-347708	A	20011113		
	JP 2001-357853	A	20011122		
	JP 2002-62421	A	20020307		

WO 2002-JP3520 W 20020409

AB The compns. are useful for pattern formation, elec. conductive materials, elec. insulating materials, antireflective membranes, photoresists, color filters, adhesives, coatings, seals, gas barriers, etc., and contain a hydrolyzable metal compound (A), e.g., alkylalkoxysilane derivs., and a compound (B) capable of accelerating hydrolytic polycondensation and crosslinking of A in the presence of oxygen and under light irradiation. Thus, mixing 100 parts Kaneka MS-S 303 (methyldimethoxysilyl-terminated polypropylene glycol) with 0.5 parts maleic anhydride, and mild-heating gave a title composition, which was exposed under high pressure Hg lamp to give a test sample.

IC ICM C08G077-00
ICS C08G079-00; C08L087-00; C08L101-10; C09D187-00; C09D201-10; C09J187-00; C09J201-10; C08J005-18; C09K003-10; G02B001-10; G02B003-00; G02B005-20; G02B006-13; G03F007-075; H01B001-12; H01B003-46; H01L051-00; H05B033-12; H05B033-14

CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 42, 74, 76

ST hydrolyzable metal compd methyldimethoxysilyl terminated polyoxypropylene photoreactive compn; maleic anhydride light irradiation crosslinking agent photocurable compn

IT 9003-49-0P, Butyl acrylate homopolymer 27458-65-7P, Cyclohexyl acrylate homopolymer 57758-91-5P, Trimethylolpropane trivinyl ether homopolymer 287925-98-8P, Aronix M 110 homopolymer 473563-22-3P 473563-24-5P 473563-25-6P 473563-26-7P 473563-29-0P 473563-30-3P 473563-31-4P 473714-61-3P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photoreactive and photocurable compns. containing hydrolyzable silane compds.)

IT 108-31-6, Maleic anhydride, uses 1631-25-0, N-Cyclohexylmaleimide 162881-26-7, Irgacure 819
RL: CAT (Catalyst use); USES (Uses)
(photosensitizer; photoreactive and photocurable compns. containing hydrolyzable silane compds.)

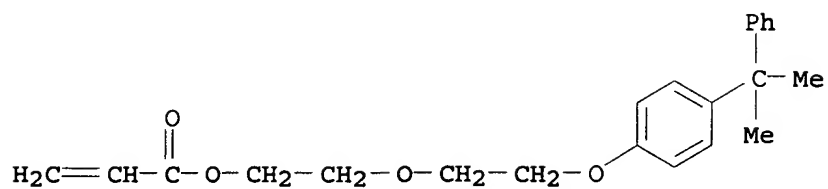
IT 473563-29-0P 473563-31-4P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photoreactive and photocurable compns. containing hydrolyzable silane compds.)

RN 473563-29-0 HCAPLUS

CN 2-Propenoic acid, 2-[2-[4-(1-methyl-1-phenylethyl)phenoxy]ethoxy]ethyl ester, polymer with α -(dimethoxymethylsilyl)- ω -[(dimethoxymethylsilyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and α -(7-oxabicyclo[4.1.0]hept-3-ylmethyl)- ω -hydroxypoly[oxy(1-oxo-1,6-hexanediyl)] ester with 1,2,3,4-butanetetracarboxylic acid (4:1) (9CI)
(CA INDEX NAME)

CM 1

CRN 192462-21-8
CMF C22 H26 O4



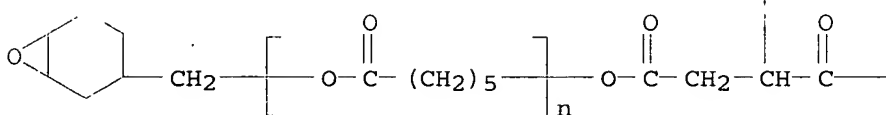
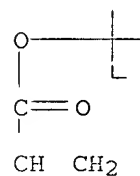
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CRN 151865-34-8

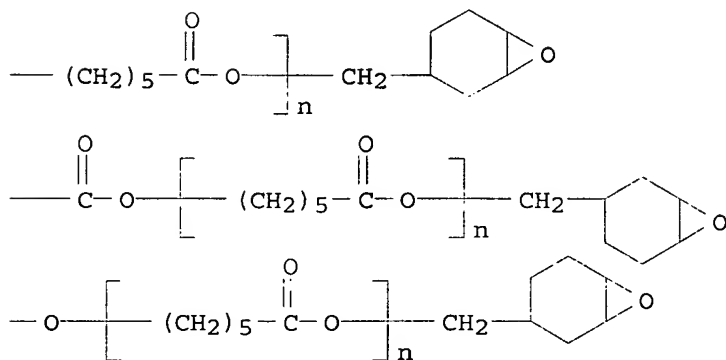
CMF (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n C36 H50 O12

CCI PMS

PAGE 1-A



PAGE 1-B

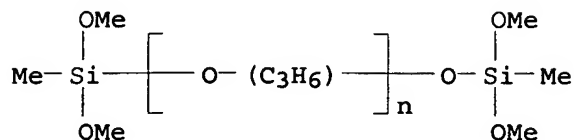


CM 3

CRN 77396-40-8

CMF (C3 H6 O)n C6 H18 O5 Si2

CCI IDS, PMS



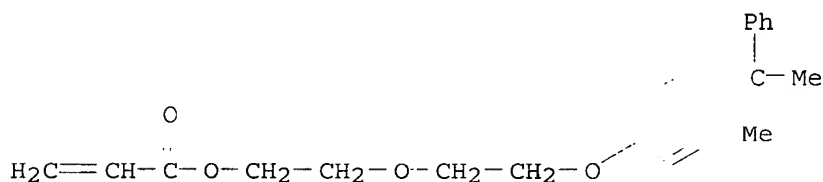
RN 473563-31-4 HCAPLUS

CN 2-Propenoic acid, 2-[2-[4-(1-methyl-1-phenylethyl)phenoxy]ethoxy]ethyl ester, polymer with α -(dimethoxymethylsilyl)- ω -[(dimethoxymethylsilyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 192462-21-8

CMF C22 H26 O4

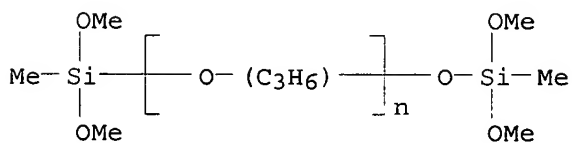


CM 2

CRN 77396-40-8

CMF (C3 H6 O)_n C6 H18 O5 Si2

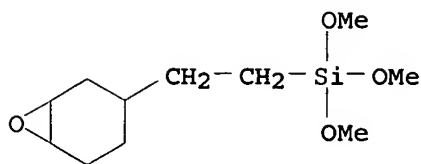
CCI IDS, PMS



CM 3

CRN 3388-04-3

CMF C11 H22 O4 Si



RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 26 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:874413 HCAPLUS

DN 136:20552

TI Epoxy-modified polyimides for photo-sensitive compositions, coverlay films, solder resists and printed circuit boards using them

IN Okada, Yoshifumi; Hara, Masayuki; Nojiri, Hitoshi

PA Kanegafuchi Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 28 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001335619	A2	20011204	JP 2000-396893	20001227
	US 2001056174	A1	20011227	US 2000-749607	20001228
	US 6605353	B2	20030812		
	TW 567198	B	20031221	TW 2000-89128093	20001228
PRAI	JP 1999-373681	A	19991228		
	JP 2000-62319	A	20000307		
	JP 2000-84769	A	20000324		

AB The comps. having good low-temperature processability and giving cured products

with good resistance to heat, contain epoxy-modified polyimides (A) and photoinitiators, where the A is obtained by modifying OH or COOH group-containing polyimide polymers with epoxy compds. Thus, preparing a polyimide from bis[4-(3-aminophenoxy)phenyl] sulfone, 2,2'-bis(4-hydroxyphenyl)propane dibenzoate 3,3',4,4'-tetracarboxylic dianhydride and diaminobenzoic acid with Mw 65,000 and Tg 190°, dissolving the polyimide 33 in dioxolane 66, and mixing with allyl glycidyl ether 2.85 in dioxolane 25 g at 70° for 2 h gave a modified polyimide 100 g of which was combined with 4,4'-diaminodiphenyl sulfone 0.5, bis(2,4,6-trimethylbenzoyl)phenylphosphine oxide 0.5, isocyanuric acid tri(ethane acrylate) 30 and Epikote 828 3 g to give a photo-curable composition useful for forming a coverlay film for printed circuit board.

IC ICM C08G059-40

ICS C08J005-18; G03F007-038; H05K003-28; G03F007-004; C08L063-00

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 76

IT 80-08-0DP, 4,4'-Diaminodiphenyl sulfone, crosslinked with epoxy modified polyimide-siloxanes 106-91-2DP, Glycidyl methacrylate, reaction products with epoxy-modified polyimide-siloxanes 2373-98-0DP, epoxy-modified polyimide-siloxane polymers 2770-50-5DP, epoxy-modified polyimide-siloxane polymers 25068-38-6DP, Epikote 828, crosslinked with epoxy modified polyimide-siloxanes 30203-11-3DP, Bis[4-(3-aminophenoxy)phenyl] sulfone, epoxy-modified polyimide-siloxane polymers 40220-08-4DP, Tris(2-hydroxyethyl)isocyanuric acid triacrylate, crosslinked with epoxy modified polyimide-siloxanes 378230-19-4P

378230-20-7P 378230-21-8P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(epoxy-modified polyimides for photo-sensitive compns., coverlay films, solder resists and printed circuit boards using them)

IT 378230-20-7P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(epoxy-modified polyimides for photo-sensitive compns., coverlay films, solder resists and printed circuit boards using them)

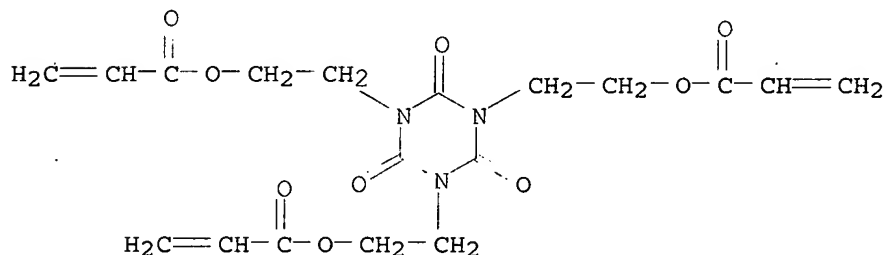
RN 378230-20-7 HCAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, (1-methylethylidene)di-4,1-phenylene ester, polymer with diaminobenzoic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate, 2-propenyl 2-methyl-2-propenoate, 4,4'-sulfonylbis[benzenamine], 3,3'-[sulfonylbis(4,1-phenyleneoxy)]bis[benzenamine] and (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 40220-08-4

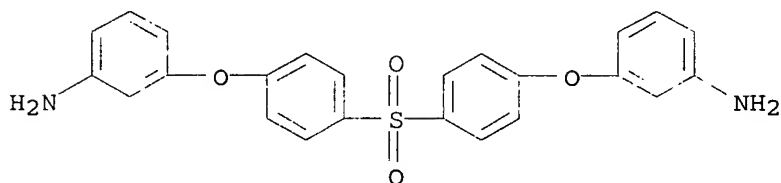
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CM 2

CRN 30203-11-3

CMF C24 H20 N2 O4 S



CM 3

CRN 27576-04-1

CMF C7 H8 N2 O2

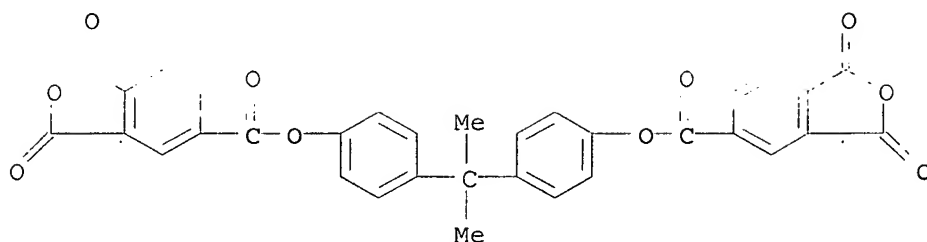
CCI IDS

2 [D1-NH₂]D1-CO₂H

CM 4

CRN 2770-50-5

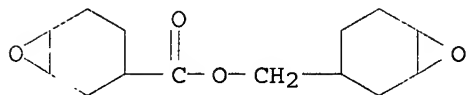
CMF C33 H20 O10



CM 5

CRN 2386-87-0

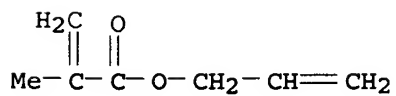
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CM 6

CRN 96-05-9

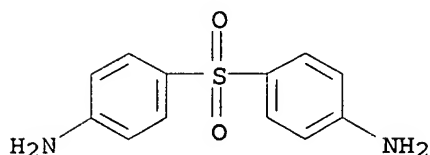
CMF C7 H10 O2



CM 7

CRN 80-08-0

CMF C12 H12 N2 O2 S



L39 ANSWER 27 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:692309 HCAPLUS

DN 135:243394

TI Die-attaching polyurethane acrylate adhesive paste compositions with fast-curing character for semiconductor devices

IN Kagimoto, Yoshihiro

PA Sumitomo Bakelite Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001257220	A2	20010921	JP 2000-68099	20000313
PRAI	JP 2000-68099		20000313		

AB Title composition comprises (A) urethane di(meth)acrylate derived from polyalkylene glycol, diisocyanate, and hydroxyalkyl (meth)acrylic acid, (B) (meth)acryl group-containing reactive diluent, (C) triglycidyl isocyanurate, (D) phosphoric acid group-containing (meth)acrylate, (E) epoxy alkoxysilane, (F) organic peroxide and/or azo compound, (G) inorg. filler, wherein the weight ratio of F/(A + B + C) = 0.1-5%. Thus, a composition comprising Aronix M-1600 45, diethylene glycol monoacrylate Ph ether 45, T.E.P.I.C. 10, cumyl peroxyneodecanoate 0.5, Kayamer PM 21 1, KMB 303 0.5, and powdered Ag 300 parts was kneaded to give a conductive paste exhibiting good stability, workability, and fast curing property.

IC ICM H01L021-52

ICS C08G059-36; C08G059-40; C09J004-02; C09J009-02; C09J163-00; C09J175-14; C09J183-06

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

IT 360796-01-6P 360796-02-7P 360796-03-8P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of polyurethane acrylate die-attaching adhesive paste with fast-curing character for semiconductor devices)

IT 360796-01-6P 360796-02-7P 360796-03-8P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of polyurethane acrylate die-attaching adhesive paste with fast-curing character for semiconductor devices)

RN 360796-01-6 HCAPLUS
 CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-(2-phenoxyethoxy)ethyl 2-propenoate, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane and 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI)
 (CA INDEX NAME)

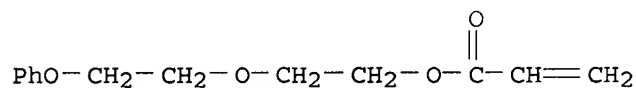
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CRN 100629-45-6
 CMF Unspecified
 CCI MAN

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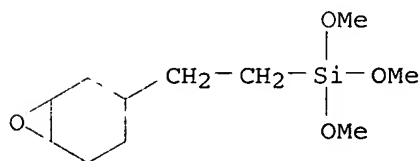
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CRN 61630-25-9
 CMF C13 H16 O4



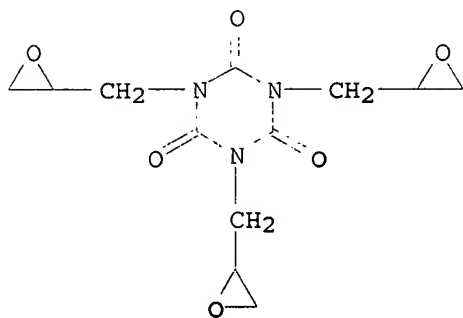
CM 3

CRN 3388-04-3
 CMF C11 H22 O4 Si



CM 4

CRN 2451-62-9
 CMF C12 H15 N3 O6



CM 5

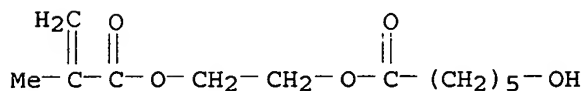
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 6

CRN 85099-10-1

CMF C12 H20 O5



CM 7

CRN 7664-38-2

CMF H3 O4 P

O

HO P OH

OH

RN 360796-02-7 HCAPLUS

CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-([1,1'-biphenyl]-4-yloxy)ethyl 2-propenoate, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane and 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

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CMF Unspecified

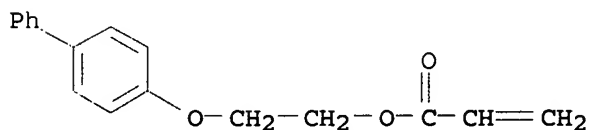
CCI MAN

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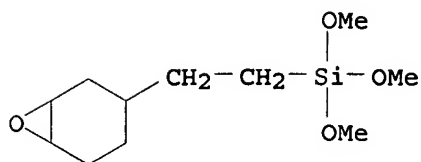
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CM 3

CRN 3388-04-3

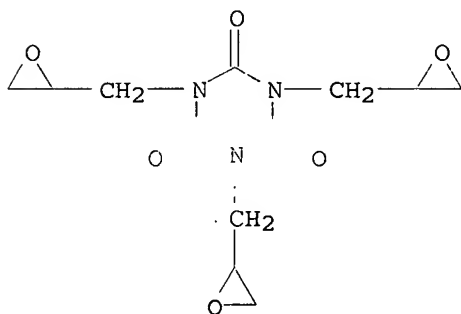
CMF C11 H22 O4 Si



CM 4

CRN 2451-62-9

CMF C12 H15 N3 O6



CM 5

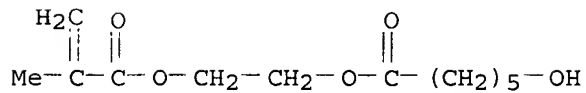
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CMF C12 H20 O5 . x H3 O4 P

CM 6

CRN 85099-10-1

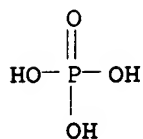
CMF C12 H20 O5



CM 7

CRN 7664-38-2

CMF H3 O4 P



RN 360796-03-8 HCAPLUS

CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, (octahydro-4,7-methano-1H-indene-5,?-diyl)bis(methylene) di-2-propenoate, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane and 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

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CRN 100629-45-6

CMF Unspecified

CCI MAN

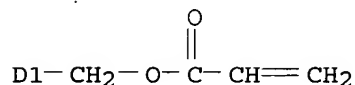
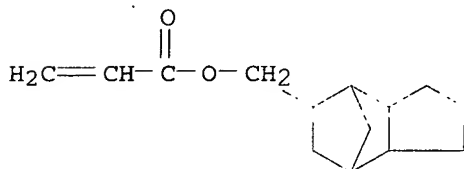
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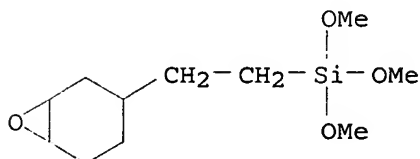
CCI IDS



CM 3

CRN 3388-04-3

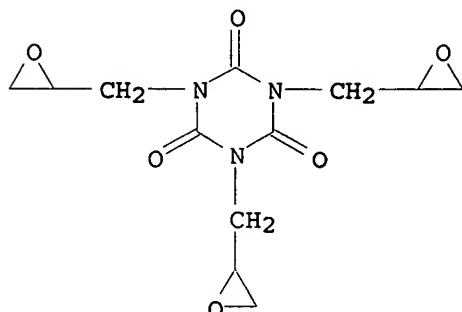
CMF C11 H22 O4 Si



CM 4

CRN 2451-62-9

CMF C12 H15 N3 O6



CM 5

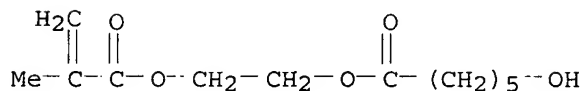
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CMF C12 H20 O5 . x H3 O4 P

CM 6

CRN 85099-10-1

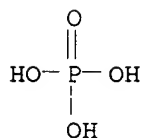
CMF C12 H20 O5



CM 7

CRN 7664-38-2

CMF H3 O4 P



L39 ANSWER 28 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:691718 HCAPLUS

DN 135:247249

TI Cationically polymerizable dental adhesive composition

IN Chappelow, Cecil C.; Eick, David J.; Oxman, Joel D.; Pinzino, Charles S.; Code, James; Rozzi, Sharon

PA The Curators of the University of Missouri, USA; 3m Innovative Properties Company

SO Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW

DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1133971	A1	20010919	EP 2001-301922	20010302
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6610759	B1	20030826	US 2000-519532	20000306
	CA 2339403	AA	20010906	CA 2001-2339403	20010305
	JP 2001288024	A2	20011016	JP 2001-61539	20010306
PRAI	US 2000-519532	A	20000306		

OS MARPAT 135:247249

AB An adhesive composition that included a mixture of a cationically polymerizable component, an acidic component, and an initiator is provided. Preferably, the initiator comprises an iodonium salt, a visible light sensitizer, and an electron donor compound, wherein the initiator has a photoinduced potential greater than or equal to that of N,N,-dimethylaniline in a standard solution of 2.9x10⁻⁵ mole/g di-Ph iodonium hexafluoroantimonate and 1.5x10⁻⁵ mole/g camphorquinone in 2-butanone. This adhesive composition is cationically polymerizable and is able to bond to hard tissue and cationic restorative materials upon curing. A mixture containing 4216G 80, and 2-(methacryloyloxy)ethyl maleate 20% was prepared To that mixture was added [4-(2-hydroxytetradecyloxyphenyl)]phenyliodonium hexafluoroantimonate 3.0, ethyl-p-dimethylaminobenzoate 0.05, and camphorquinone 2.0%. Adhesive properties of a series of dental adhesive were studied.

IC ICM A61K006-00
ICS A61K006-087; A61L024-04; A61L024-00

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

IT 77272-87-8P 77272-88-9P 361176-38-7P 361176-39-8P
361176-40-1P 361176-41-2P 361176-42-3P
361176-43-4P 361176-44-5P 361176-45-6P 361176-46-7P
361176-47-8P 361176-48-9P 361176-49-0P 361176-50-3P
361176-52-5P 361176-53-6P 361176-54-7P 361176-55-8P
361176-56-9P 361176-57-0P 361176-58-1P

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cationically polymerizable dental adhesive composition)

IT 361176-38-7P 361176-40-1P 361176-42-3P
361176-43-4P 361176-45-6P 361176-48-9P
361176-50-3P 361176-53-6P 361176-54-7P
361176-56-9P

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cationically polymerizable dental adhesive composition)

RN 361176-38-7 HCAPLUS

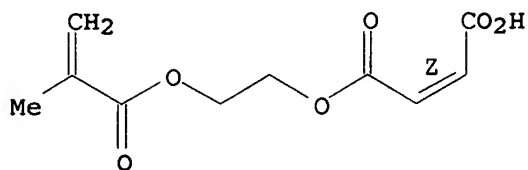
CN 2-Butenedioic acid (2Z)-, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis[oxirane] and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 51978-15-5

CMF C10 H12 O6

Double bond geometry as shown.

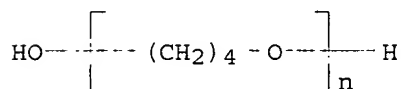


CM 2

CRN 25190-06-1

CMF (C4 H8 O)n H2 O

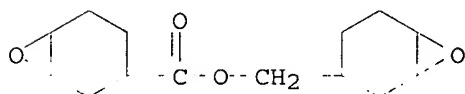
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CM 3

CRN 2386-87-0

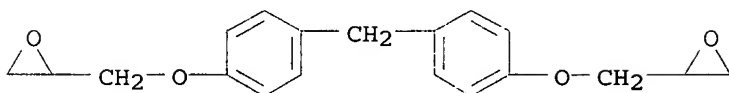
CMF C14 H20 O4



CM 4

CRN 2095-03-6

CMF C19 H20 O4



RN 361176-40-1 HCAPLUS

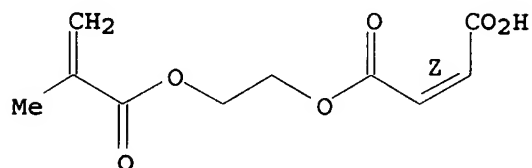
CM 2-Butenedioic acid (2Z)-, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with (chloromethyl)oxirane, α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 4,4'-(1-methylethylidene)bis[phenol] and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 51978-15-5

CMF C10 H12 O6

Double bond geometry as shown.

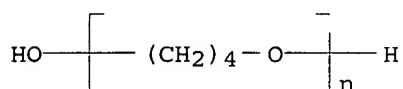


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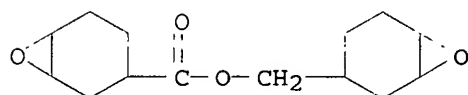
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CM 3

CRN 2386-87-0

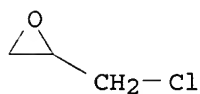
CMF C14 H20 O4



CM 4

CRN 106-89-8

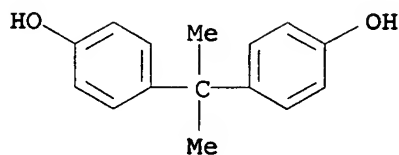
CMF C3 H5 Cl O



CM 5

CRN 80-05-7

CMF C15 H16 O2



RN 361176-42-3 HCAPLUS

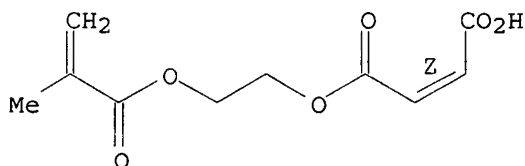
CN 2-Butenedioic acid (2Z)-, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with (chloromethyl)oxirane, α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-methyl-2-propenoate, 4,4'-(1-methylethylidene)bis[phenol] and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 51978-15-5

CMF C10 H12 O6

Double bond geometry as shown.

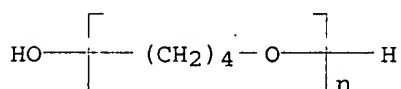


CM 2

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

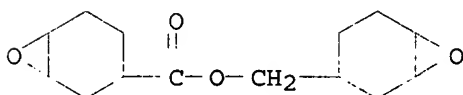
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CM 3

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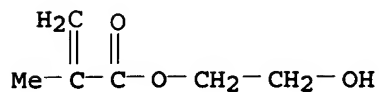
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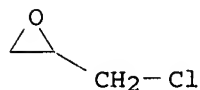
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CRN 106-89-8

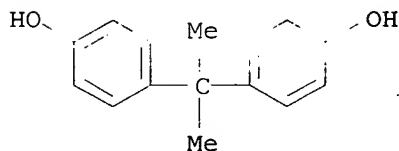
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CM 6

CRN 80-05-7

CMF C15 H16 O2



RN 361176-43-4 HCAPLUS

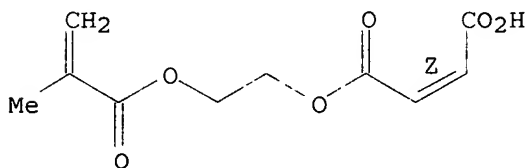
CM 2-Butenedioic acid (2Z)-, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis[oxirane] and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 51978-15-5

CMF C10 H12 O6

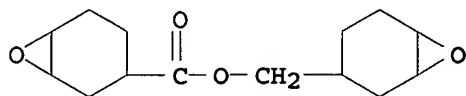
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CM 2

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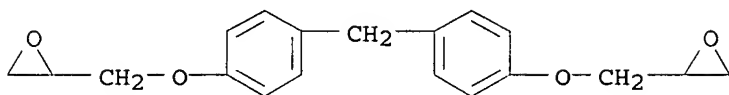
CMF C14 H20 O4



CM 3

CRN 2095-03-6

CMF C19 H20 O4



RN 361176-45-6 HCAPLUS

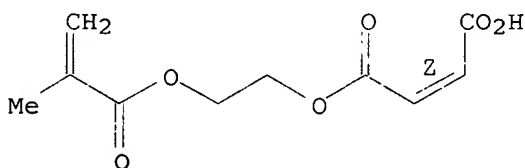
CN 2-Butenedioic acid (2Z)-, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2,2'-[[2-ethyl-2-[(oxiranylmethoxy)methyl]-1,3-propanediyl]bis(oxymethylene)]bis[oxirane], 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis[oxirane] and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 51978-15-5

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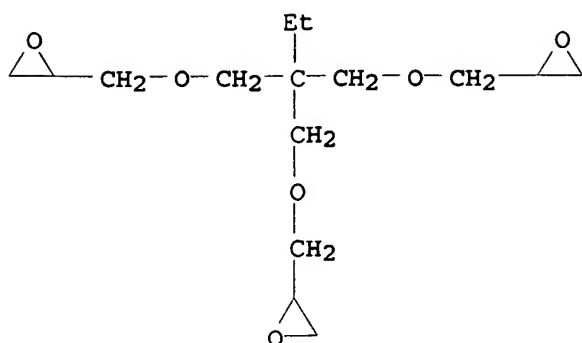
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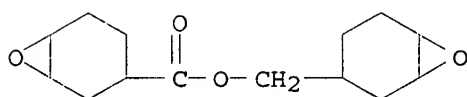
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CM 3

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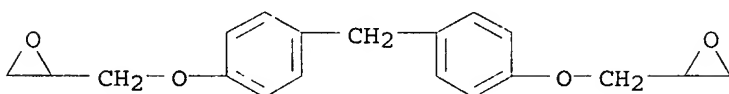
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CM 4

CRN 2095-03-6

CMF C19 H20 O4



RN 361176-48-9 HCAPLUS

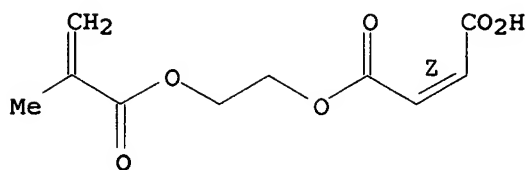
CN 2-Butenedioic acid (2Z)-, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with (chloromethyl)oxirane, 2,2'-[[2-ethyl-2-[(oxiranylmethoxy)methyl]-1,3-propanediyl]bis(oxymethylene)]bis[oxirane], 4,4'-(1-methylethylidene)bis[phenol] and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 51978-15-5

CMF C10 H12 O6

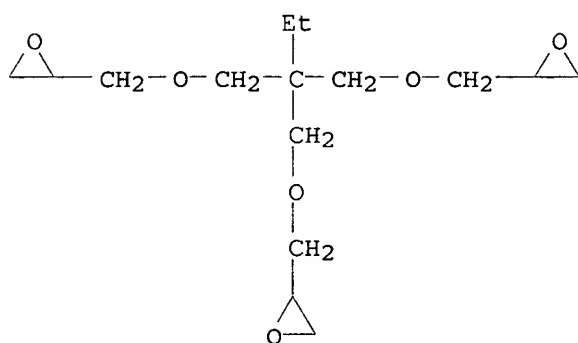
Double bond geometry as shown.



CM 2

CRN 3454-29-3

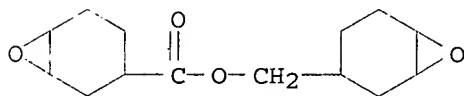
CMF C15 H26 O6



CM 3

CRN 2386-87-0

CMF C14 H20 O4



CM 4

CRN 106-89-8

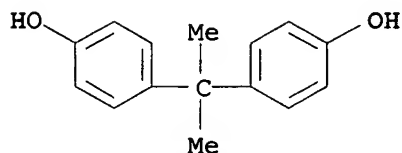
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CH₂-Cl

CM 5

CRN 80-05-7

CMF C15 H16 O2



RN 361176-50-3 HCAPLUS

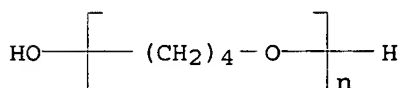
CM 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with (chloromethyl)oxirane, 2,5-furandione, α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-methyl-2-propenoate and 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

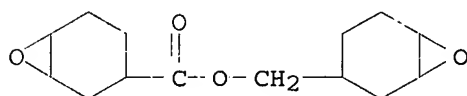
CCI PMS



CM 2

CRN 2386-87-0

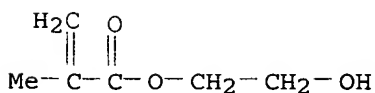
CMF C14 H20 O4



CM 3

CRN 868-77-9

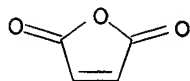
CMF C6 H10 O3



CM 4

CRN 108-31-6

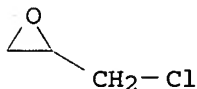
CMF C4 H2 O3



CM 5

CRN 106-89-8

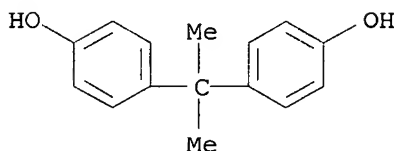
CMF C3 H5 Cl O



CM 6

CRN 80-05-7

CMF C15 H16 O2



RN 361176-53-6 HCAPLUS

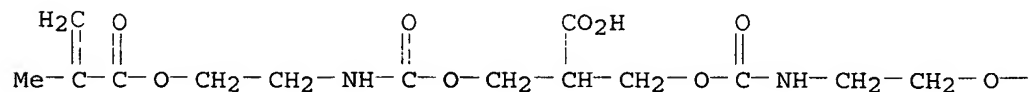
CN 2-Butenedioic acid (2Z)-, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with (chloromethyl)oxirane, 2,20-dimethyl-3,8,14,19-tetraoxo-4,9,13,18-tetraoxa-7,15-diazaheneicosa-1,20-diene-11-carboxylic acid, α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-methyl-2-propenoate, 4,4'-(1-methylethylidene)bis[phenol] and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate (9CI) (CA INDEX NAME)

CM 1

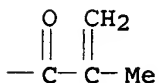
CRN 361176-51-4

CMF C18 H26 N2 O10

PAGE 1-A



PAGE 1-B

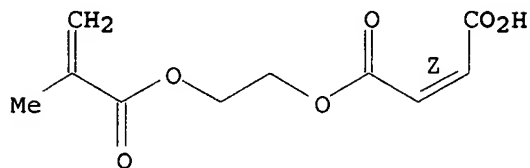


CM 2

CRN 51978-15-5

CMF C10 H12 O6

Double bond geometry as shown.

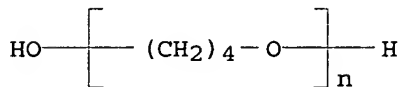


CM 3

CRN 25190-06-1

$$\text{CMF} \quad (\text{C}_4 \text{ H}_8 \text{ O})_n \text{ H}_2 \text{ O}$$

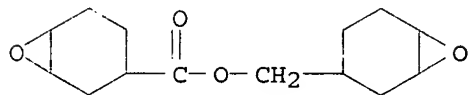
CCI PMS



CM 4

CRN 2386-87-0

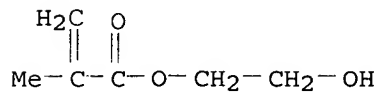
CMF C14 H20 O4



CM 5

CRN 868-77-9

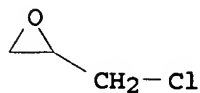
CMF C6 H10 O3



CM 6

CRN 106-89-8

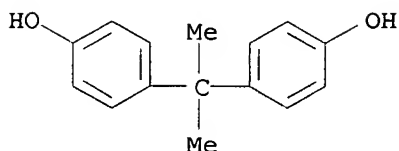
CMF C3 H5 Cl O



CM 7

CRN 80-05-7

CMF C15 H16 O2



RN 361176-54-7 HCAPLUS

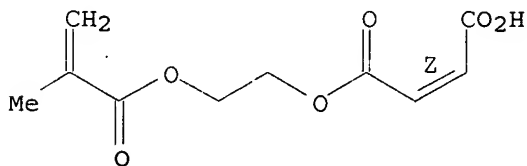
CN Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, polymer with 2,2'-[[2-ethyl-2-[(oxiranylmethoxy)methyl]-1,3-propanediyl]bis(oxymethylene)]bis[oxirane], 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis[oxirane], 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl hydrogen (2Z)-2-butenedioate and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 51978-15-5

CMF C10 H12 O6

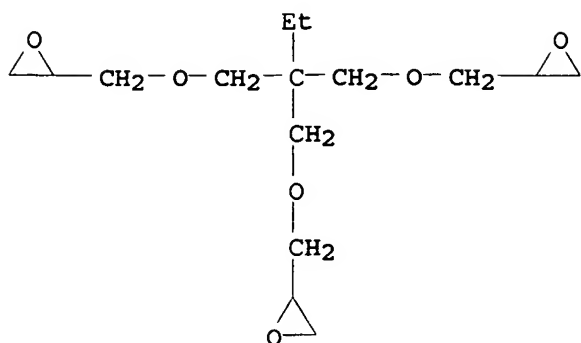
Double bond geometry as shown.



CM 2

CRN 3454-29-3

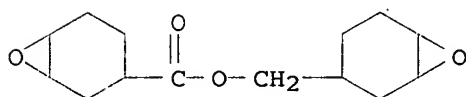
CMF C15 H26 O6



CM 3

CRN 2386-87-0

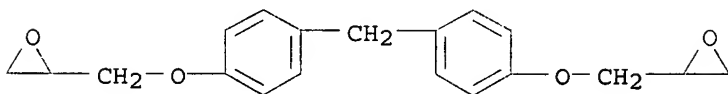
CMF C14 H20 O4



CM 4

CRN 2095-03-6

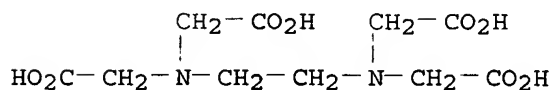
CMF C19 H20 O4



CM 5

CRN 60-00-4

CMF C10 H16 N2 O8



RN 361176-56-9 HCAPLUS

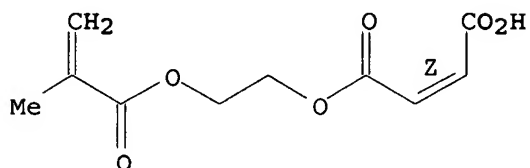
CN Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, disodium salt, polymer with (chloromethyl)oxirane, α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 4,4'-(1-methylethylidene)bis[phenol], 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl hydrogen (2Z)-2-butenedioate and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 51978-15-5

CMF C10 H12 O6

Double bond geometry as shown.

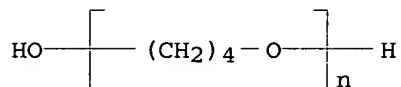


CM 2

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

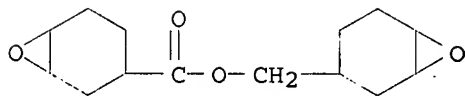
CCI PMS



CM 3

CRN 2386-87-0

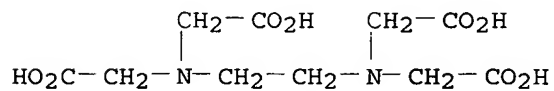
CMF C14 H20 O4



CM 4

CRN 139-33-3

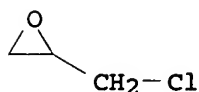
CMF C10 H16 N2 O8 . 2 Na



● 2 Na

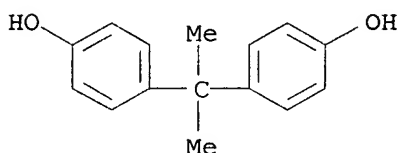
CM 5

CRN 106-89-8
CMF C3 H5 Cl O



CM 6

CRN 80-05-7
CMF C15 H16 O2



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 29 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:663682 HCAPLUS

DN 135:233895

TI Highly heat-resistant photosensitive epoxy acrylate resin for solder resist

IN Ishii, Kenji; Hagiwara, Isao; Harada, Toru; Miyamoto, Makoto

PA Mitsubishi Gas Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001247648	A2	20010911	JP 2000-58105	20000303
PRAI	JP 2000-58105		20000303		

AB The resin is prepared by reacting an epoxy acrylate with a cyanate ester, treating with a polybasic carboxylic acid anhydride, and reacting with a monofunctional epoxy resin and/or di- or tribasic carboxylic acid anhydride. Heating bisphenol A type epoxy acrylate (SP 1509) and bisphenol A cyanate (BT 2070) in a mixed solvent at 70° for 5 h, treating with pyromellitic anhydride at 70°, and reacting with tetrahydrophthalic anhydride (Rikacid THPA) gave a resin with acid value 96.5 mg-KOH/g. A composition containing the resin 50, TGIC 15, Irgacure 5, BYK 354 1, BYK 057 1, phthalocyanine 1, BST #200 (talc) 20, and Ba sulfate 10 parts was coated (40-μm) on a Cu foil-clad laminate, exposed to light through a pattern film until it was tack free, and washed with 1% aqueous Na2CO3, giving an image layer with number mol. weight 2150 and good dryability and resolution

IC ICM C08G059-14

ICS C08G059-20; G03F007-004; G03F007-027; C09D005-00; C09D163-00; C09D163-10; C09J163-00; C09J163-10

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)

Section cross-reference(s): 38

IT 358717-62-1P 358717-63-2P 358717-64-3P 359763-11-4P
359763-14-7P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(highly heat-resistant photosensitive epoxy acrylate resin for solder resist)

IT 358717-63-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(highly heat-resistant photosensitive epoxy acrylate resin for solder resist)

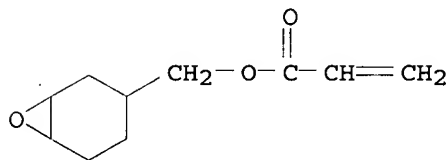
RN 358717-63-2 HCAPLUS

CN 2-Propenoic acid, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, 1,1'-(methylenedi-4,1-phenylene)bis[1H-pyrrole-2,5-dione], (1-methylethylidene)di-4,1-phenylene dicyanate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate and 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI) (CA INDEX NAME)

CM 1

CRN 64630-63-3

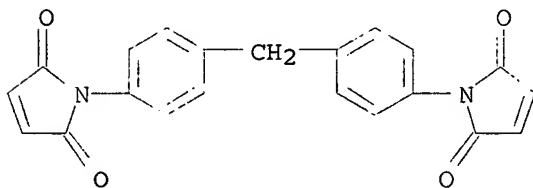
CMF C10 H14 O3



CM 2

CRN 13676-54-5

CMF C21 H14 N2 O4

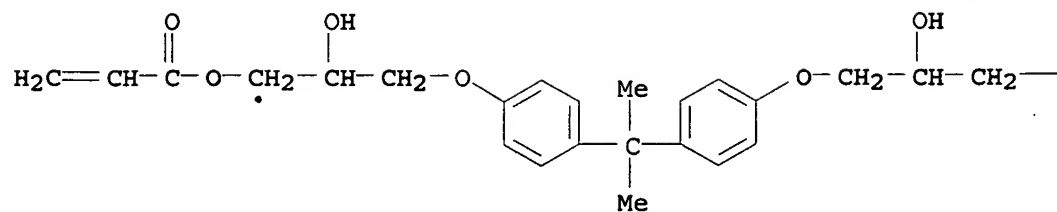


CM 3

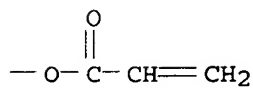
CRN 4687-94-9

CMF C27 H32 O8

PAGE 1-A



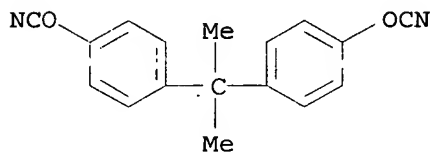
PAGE 1-B



CM 4

CRN 1156-51-0

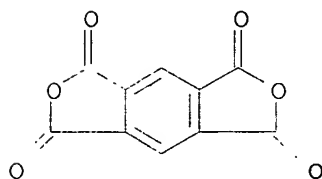
CMF C17 H14 N2 O2



CM 5

CRN 89-32-7

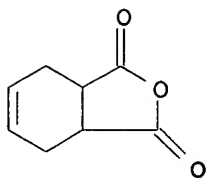
CMF C10 H2 O6



CM 6

CRN 85-43-8

CMF C8 H8 O3



L39 ANSWER 30 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:479807 HCAPLUS

DN 135:77953

TI Photocurable compositions and manufacture of three-dimensional structure therefrom with good precision

IN Hagiwara, Tsuneo; Tamura, Junichi

PA Teijin Seiki Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001181313	A2	20010703	JP 1999-367254	19991224
PRAI	JP 1999-367254		19991224		

AB The compns. satisfy a relationship of $B1/B0 \leq 0.95$ [$B0$ = light transmittance (355 nm) of the compns.; $B1$ = light transmittance (355 nm) of their cured products]. Three-dimensional structures are manufactured by (1) forming a photocurable composition layer, (2) light irradiation on the layer to form a cured layer with specific pattern and thickness, (3) applying the composition on the resulting cured product, (4) light irradiation on the compns. to

form the second cured layer, and (5) repeating those processes. Thus, a composition ($B1/B0$ 0.80) containing (a) a urethane acrylate oligomer prepared from

bisphenol A-propylene glycol (4 mol) adduct, IPDI, and 2-hydroxyethyl acrylate, (b) NK Ester A 200 (polyethylene glycol diacrylate), (c) A-TMPT 3E (ethoxylated trimethylolpropane triacrylate), and (d) rubrene was formed into a three-dimensional structure using the above method.

IC ICM C08F002-48

ICS B29C067-00; C08F002-00; B29K101-10; B29L031-00

CC 38-3 (Plastics Fabrication and Uses)

IT 175971-97-8P 179627-25-9P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photocurable compns. for manufacture of three-dimensional structure therefrom with good precision)

IT 517-51-1, Rubrene 716-39-2D, 2,3-Naphthalenedicarboxylic anhydride, imidate Et ester

RL: MOA (Modifier or additive use); USES (Uses)
(photocurable compns. for manufacture of three-dimensional structure therefrom with good precision)

IT 179627-25-9P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photocurable compns. for manufacture of three-dimensional structure therefrom with good precision)

RN 179627-25-9 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-

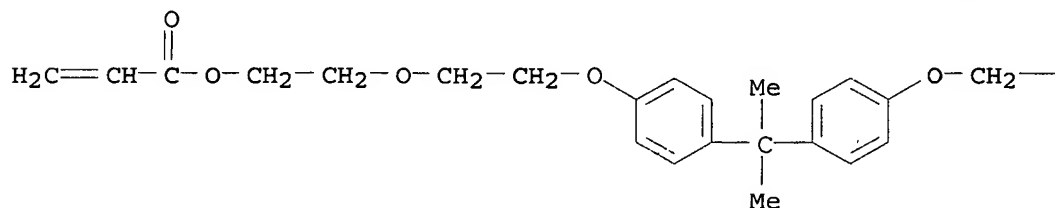
ylmethyl ester, polymer with 2,2'-[1,4-butanediylbis(oxyethylene)]bis[oxirane], α -hydro- ω -[(1-oxo-2-propenyl)oxy] [poly(oxy-1,2-ethanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), and (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

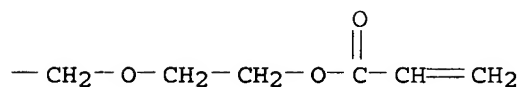
CRN 56361-55-8

CMF C29 H36 O8

PAGE 1-A



PAGE 1-B



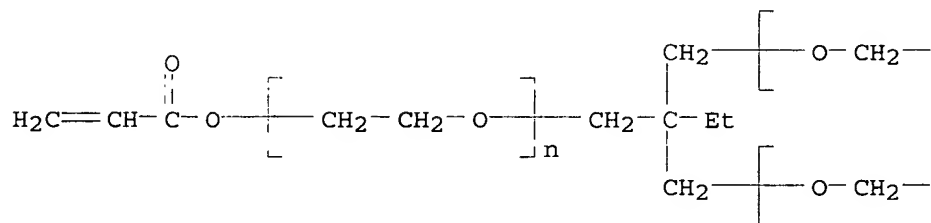
CM 2

CRN 28961-43-5

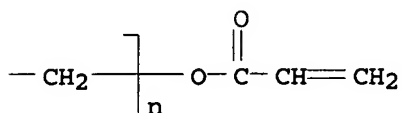
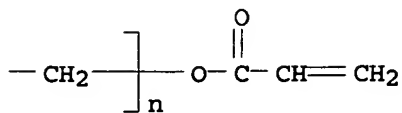
CMF (C2 H4 O)_n (C2 H4 O)_n (C2 H4 O)_n C15 H20 O6

CCI PMS

PAGE 1-A



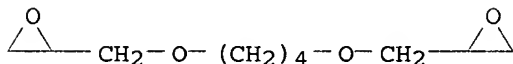
PAGE 1-B



CM 3

CRN 2425-79-8

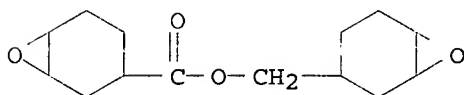
CMF C10 H18 O4



CM 4

CRN 2386-87-0

CMF C14 H20 O4



L39 ANSWER 31 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:136795 HCAPLUS

DN 134:194649

TI Procedure for the production of storable modified cycloaliphatic epoxy resins and their use

IN Krueger, Alfred

PA Germany

SO Ger. Offen., 8 pp.

CODEN: GWXXBX

DT Patent

LA German

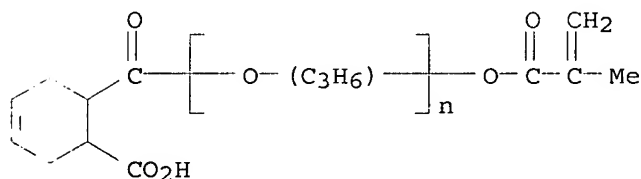
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19939738	A1	20010222	DE 1999-19939738	19990821
PRAI	DE 1999-19939738		19990821		

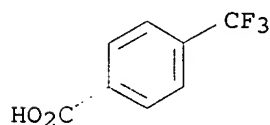
AB Storage-stable modified cycloaliph. epoxy resins contain ≥ 2 olefinic unsatd. double bonds and, optionally, have F content 0.01-3% and/or Si content 0.01-10%. These resins are manufactured by reaction of the epoxy resins with unsatd. semiesters. These resins are useful for modifying unsatd. carboxyl-containing polyesters or carboxyl-containing acrylic

polymers or as binders for the production of cationic and/or radical radiation-hardenable coatings. A typical resin was manufactured by heating 140 parts 3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexanecarboxylate resin with 30 parts semiester of hexahydrophthalic acid anhydride and hydroxyethyl methacrylate at 70° until a clear liquid was obtained, and heating this clear liquid with 0.2 parts LiOH.H₂O at 90° until the acid value dropped to <2.

IC ICM C08G059-00
ICS C08G077-38
CC 42-9 (Coatings, Inks, and Related Products)
Section cross-reference(s): 37
IT 327969-15-3P 327969-17-5P 327969-18-6P
327969-19-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of storable modified cycloaliph. epoxy resins for coatings)
IT 327969-17-5P 327969-18-6P 327969-19-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of storable modified cycloaliph. epoxy resins for coatings)
RN 327969-17-5 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer, 4-(trifluoromethyl)benzoate, ester with α -[(6-carboxy-3-cyclohexen-1-yl)carbonyl]- ω -[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)
CM 1
CRN 327969-16-4
CMF (C3 H6 O)_n C12 H14 O5
CCI IDS, PMS



CM 2
CRN 455-24-3
CMF C8 H5 F3 O2

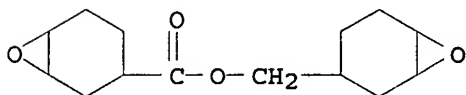


CM 3
CRN 25085-98-7

CMF (C14 H20 O4)x
CCI PMS

CM 4

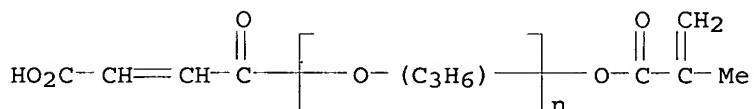
CRN 2386-87-0
CMF C14 H20 O4



RN 327969-18-6 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer, ester with α -[(2Z)-3-carboxy-1-oxo-2-propenyl]- ω -[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 329310-48-7
CMF (C3 H6 O)n C8 H8 O5
CCI IDS, PMS

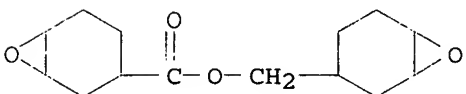


CM 2

CRN 25085-98-7
CMF (C14 H20 O4)x
CCI PMS

CM 3

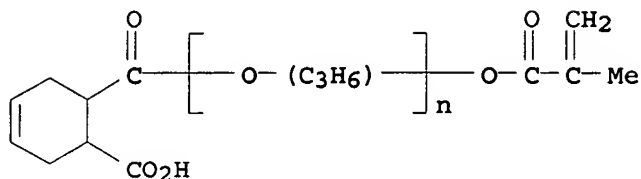
CRN 2386-87-0
CMF C14 H20 O4



RN 327969-19-7 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, homopolymer, ester with α -[(6-carboxy-3-cyclohexen-1-yl)carbonyl]- ω -[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 327969-16-4
 CMF (C3 H6 O)_n C12 H14 O5
 CCI IDS, PMS

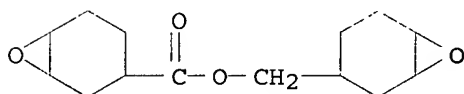


CM 2

CRN 25085-98-7
 CMF (C14 H20 O4)_x
 CCI PMS

CM 3

CRN 2386-87-0
 CMF C14 H20 O4



L39 ANSWER 32 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2001:50417 HCAPLUS
 DN 134:124545
 TI Multilayer printed circuit boards and fabrication thereof
 IN Murai, Toshikinu; Kawamoto, Kenji
 PA Toppan Printing Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001015934	A2	20010119	JP 1999-185873	19990630
PRAI	JP 1999-185873		19990630		

AB The title circuit boards are prepared by alternately laminating with an electroless plated/electrolytic plated conductor pattern and a thermal resistant polymer insulator layer, optionally containing silica microparticles. The polymer insulator layers are coated with adhesive layer containing a polyfunctional epoxy compound, a hardening agent, epoxy silane coupling agent, and an alkoxysilane. The use of the adhesive layer gives the conductor pattern increased adhesion strength and reliable highly integrated multilayer printed circuit boards.

IC ICM H05K003-46
 ICS H05K001-03; H05K003-38

CC 76-2 (Electric Phenomena)

Section cross-reference(s): 38, 56

IT 263897-21-8P, Cyclomer M 100-EHPE 3150-Ripoxy VR 90-phthalic anhydride copolymer

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PRP (Properties); **PREP** (Preparation); PROC (Process); USES (Uses)

(thermal resistant insulator; multilayer printed circuit boards and fabrication thereof)

IT 263897-21-8P, Cyclomer M 100-EHPE 3150-Ripoxy VR 90-phthalic anhydride copolymer

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PRP (Properties); **PREP** (Preparation); PROC (Process); USES (Uses)

(thermal resistant insulator; multilayer printed circuit boards and fabrication thereof)

RN 263897-21-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 1,3-isobenzofurandione and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 244772-00-7

CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3

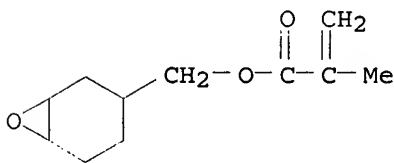
CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 82428-30-6

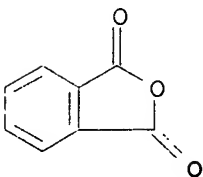
CMF C11 H16 O3



CM 3

CRN 85-44-9

CMF C8 H4 O3



CM 4

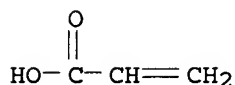
CRN 55127-80-5

CMF (C21 H24 O4)x . 2 C3 H4 O2

CM 5

CRN 79-10-7

CMF C3 H4 O2



CM 6

CRN 25085-99-8

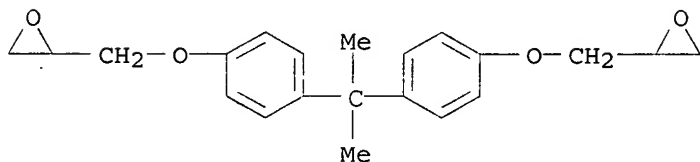
CMF (C21 H24 O4)x

CCI PMS

CM 7

CRN 1675-54-3

CMF C21 H24 O4



L39 ANSWER 33 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:869626 HCAPLUS

DN 134:29975

TI Production method of curable polyimide resin and its composition

IN Ichinose, Shigetoshi; Yamashina, Yozo; Ishikawa, Hidenobu

PA Dainippon Ink and Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000344890	A2	20001212	JP 2000-91116	20000329
PRAI	JP 1999-88149	A	19990330		

AB The curable polyimide resin which has improved heat-resistance, elec. characteristics, solvent-solubility, and photocurability, and could be patterned by developing with the rare alkaline aqueous solution, is prepared by reaction of ≥ 2 isocyanate group-containing compound with ≥ 2

hydroxy group-containing compound, ≥ 1 acid anhydride group-containing compound, and (meth)acryloyl group and epoxy group or hydroxy group-containing compound Thus a composition comprising imide-urethane acrylate

prepared from ethylene glycol acetate, isophorone diisocyanate, dimethylolbutanoic acid, trimellitic anhydride, and glycidyl methacrylate 75, cresol novolak epoxy resin 25, dipentaerythritol hexaacrylate 10, 2-methyl-1-[4-(methylthio)phenyl]-2-morpholinopropane-1-ol 5, and N,N-dimethylbenzylamine 1 part was prepared, showing glass transition temps. 100° and 115° after cured at 150° and 170°, resp., and good photocurability and developing property.

IC ICM C08G073-10

ICS C08F002-44; C08F002-50; C08G059-44; G03F007-027; G03F007-038; C08F283-04

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 35, 74

IT 312529-92-3P 312529-94-5P 312529-96-7P 312529-98-9P 312530-00-0P 312530-02-2P 312530-03-3P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(production of curable polyimide resin and its composition)

IT 312530-03-3P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(production of curable polyimide resin and its composition)

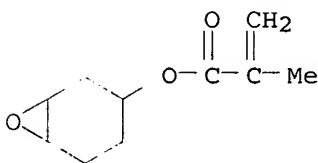
RN 312530-03-3 HCAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 1,1'-methylenebis[4-isocyanatobenzene], α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -hydroxypoly(oxy-1,2-ethanediyl)], 7-oxabicyclo[4.1.0]hept-3-yl 2-methyl-2-propenoate and 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI) (CA INDEX NAME)

CM 1

CRN 125566-99-6

CMF C10 H14 O3

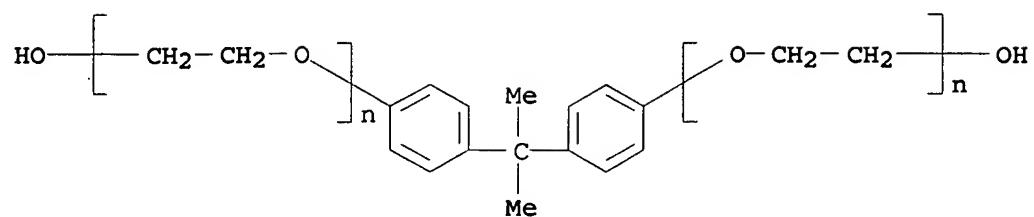


CM 2

CRN 32492-61-8

CMF (C2 H4 O)_n (C2 H4 O)_n C15 H16 O2

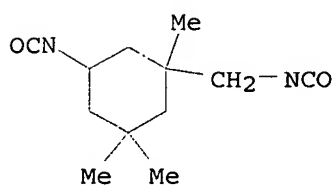
CCI PMS



CM 3

CRN 4098-71-9

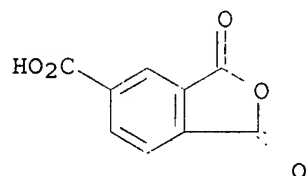
CMF C12 H18 N2 O2



CM 4

CRN 552-30-7

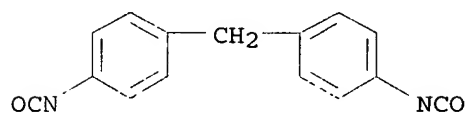
CMF C9 H4 O5



CM 5

CRN 101-68-8

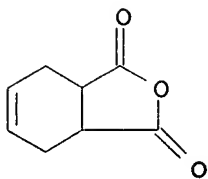
CMF C15 H10 N2 O2



CM 6

CRN 85-43-8

CMF C8 H8 O3



L39 ANSWER 34 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:659704 HCAPLUS

DN 133:253531

TI Anisotropically electrically conductive adhesives and electronic equipments therewith

IN Ito, Hiroshi; Kawada, Masakazu

PA Sumitomo Bakelite Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000256641	A2	20000919	JP 1999-57118	19990304
	JP 3503740	B2	20040308		
PRAI	JP 1999-57118		19990304		

AB Adhesives contain urethane acrylates, organic peroxides, thermoplastic elastomers, phosphate esters, epoxysilane coupling agents, and elec. conductive granules. Thus, an adhesive contained 50% 1:2 hexamethylene diisocyanate-pentaerythritol triacrylate adduct 340, 1,1,3,3-tetramethylbutyl peroxy-2-ethylhexanoate 5, 20% acrylonitrile-butadiene-methacrylic acid copolymer 500, caprolactone-modified (meth)acryloyloxyethyl acid phosphate 50, β -(3,4-epoxycyclohexyl)ethyltrimethoxysilane 1.6, and Au-Ni-plated polystyrene granules 7.0 parts.

IC ICM C09J175-16

ICS C08F290-06; H01B001-20; H01B005-16; C09J004-00; H05K003-32

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

IT 294211-30-6P 294211-31-7DP, polyester-modified

294211-32-8P 294211-33-9P 294211-34-0P

294211-36-2P 294211-37-3P 294211-39-5P

294211-41-9P 294211-43-1P 294865-01-3P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP

(Properties); TEM (Technical or engineered material use); PREP

(Preparation); USES (Uses)

(adhesives containing urethane acrylates and peroxides and thermoplastic elastomers and phosphate esters and coupling agents and elec. conductors for electronic equipments)

IT 294211-30-6P 294211-31-7DP, polyester-modified

294211-32-8P 294211-34-0P 294211-36-2P

294211-37-3P 294211-39-5P 294211-41-9P

294211-43-1P 294865-01-3P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP

(Properties); TEM (Technical or engineered material use); PREP

(Preparation); USES (Uses)

(adhesives containing urethane acrylates and peroxides and thermoplastic elastomers and phosphate esters and coupling agents and elec.

conductors for electronic equipments)

RN 294211-30-6 HCAPLUS

CN 11,15-Dioxa-2,9-diazaoctadec-17-enoic acid, 10,16-dioxo-13,13-bis[[(1-oxo-2-propenyl)oxy]methyl]-, 3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propyl ester, polymer with 1,3-butadiene, 2-methyl-2-propenoic acid, ω,ω' -[phosphinicobis(oxy)]bis[.alph a.-[2-[(1-oxo-2-propenyl)oxy]ethyl]poly[oxy(1-oxo-1,6-hexanediyl)]], 2-propenenitrile and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

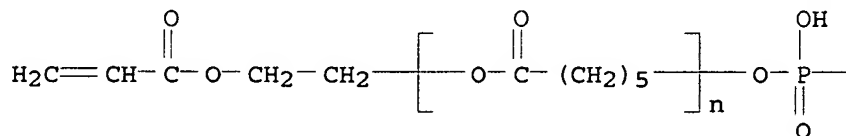
CM 1

CRN 294211-29-3

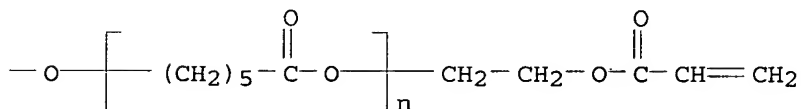
CMF (C6 H10 O2)n (C6 H10 O2)n C10 H15 O8 P

CCI PMS

PAGE 1-A



PAGE 1-B

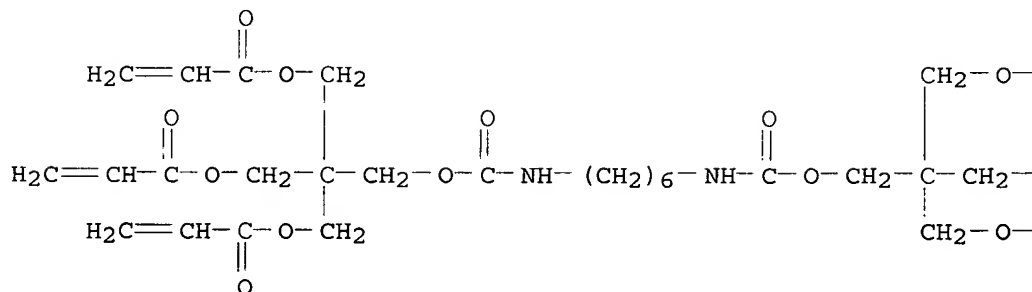


CM 2

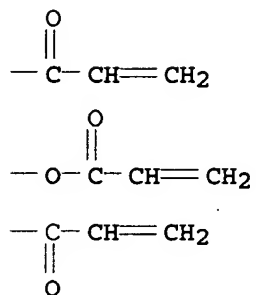
CRN 77001-81-1

CMF C36 H48 N2 O16

PAGE 1-A



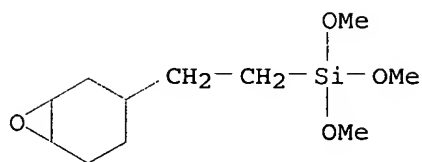
PAGE 1-B



CM 3

CRN 3388-04-3

CMF C11 H22 O4 Si



CM 4

CRN 107-13-1

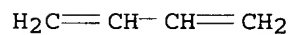
CMF C3 H3 N



CM 5

CRN 106-99-0

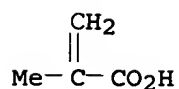
CMF C4 H6



CM 6

CRN 79-41-4

CMF C4 H6 O2



RN 294211-31-7 HCAPLUS

CN 11,15-Dioxo-2,9-diazaoctadec-17-enoic acid, 10,16-dioxo-13,13-bis[[(1-oxo-2-propenyl)oxy]methyl]-, 3-[[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propyl ester, polymer with ω,ω' -[phosphinicobis(oxy)]bis[α -[2-[(1-oxo-2-propenyl)oxy]ethyl]poly[oxy(1-oxo-1,6-hexanediyl)]] and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

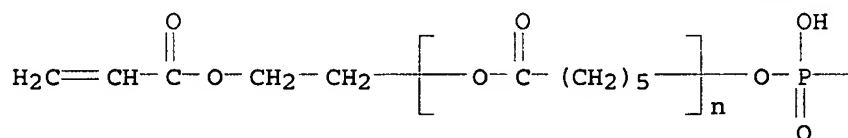
CM 1

CRN 294211-29-3

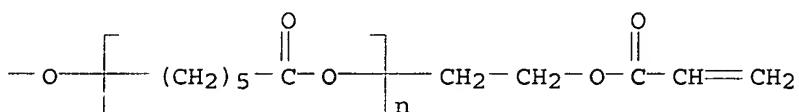
CMF (C6 H10 O2)n (C6 H10 O2)n C10 H15 O8 P

CCI	PMS
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PAGE 1-A



PAGE 1-B

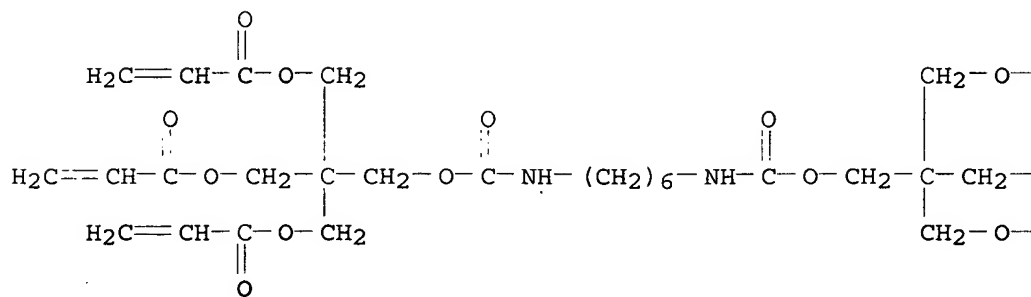


CM 2

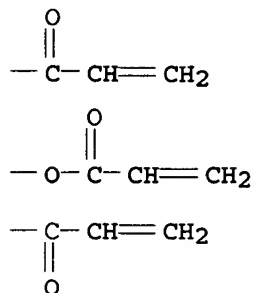
CRN 77001-81-1

CMF C36 H48 N2 O16

PAGE 1-A



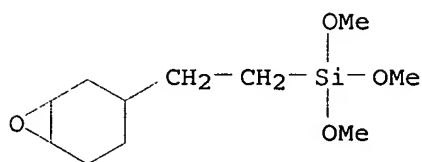
PAGE 1-B



CM 3

CRN 3388-04-3

CMF C11 H22 O4 Si



RN 294211-32-8 HCAPLUS

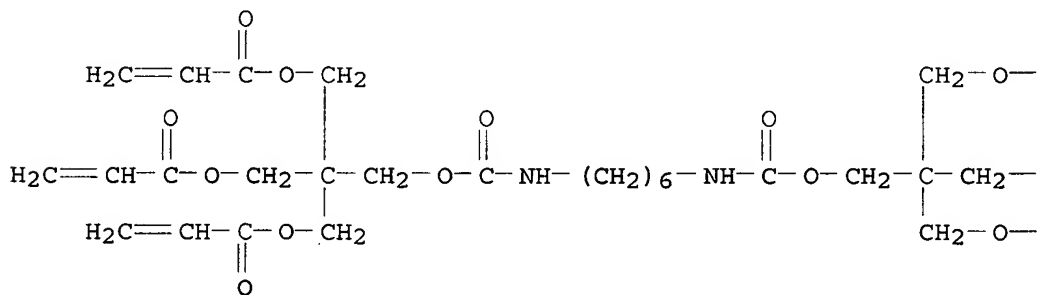
CN 11,15-Dioxa-2,9-diazaoctadec-17-enoic acid, 10,16-dioxo-13,13-bis[[[(1-oxo-2-propenyl)oxy]methyl]-, 3-[[[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propyl ester, polymer with 1,3-butadiene, 2-methyl-2-propenoic acid, 2-(phosphonooxy)ethyl 2-propenoate, 2-propenenitrile and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

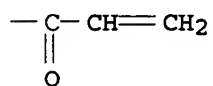
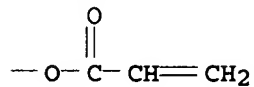
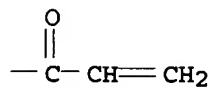
CRN 77001-81-1

CMF C36 H48 N2 O16

PAGE 1-A



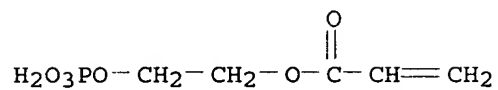
PAGE 1-B



CM 2

CRN 32120-16-4

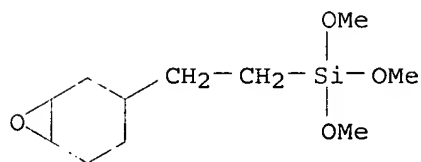
CMF C5 H9 O6 P



CM 3

CRN 3388-04-3

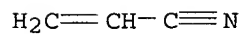
CMF C11 H22 O4 Si



CM 4

CRN 107-13-1

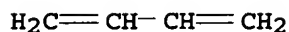
CMF C3 H3 N



CM 5

CRN 106-99-0

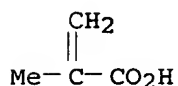
CMF C4 H6



CM 6

CRN 79-41-4

CMF C4 H6 O2



RN 294211-34-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, (4-methyl-1,3-phenylene)bis[iminocarbonyloxy[2-[[2-methyl-1-oxo-2-propenyl)oxy)methyl]-2,1-ethanediyl]] bis(2-methyl-2-propenoate), ω,ω' -[phosphinicobis(oxy)]bis[α -[2-[(1-oxo-2-propenyl)oxy]ethyl]poly[oxy(1-oxo-1,6-hexanediyl)]], 2-propenenitrile and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

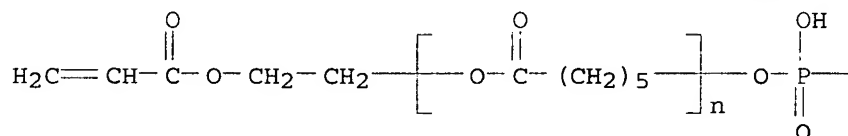
CM 1

CRN 294211-29-3

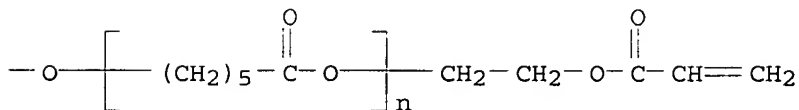
CMF (C6 H10 O2)_n (C6 H10 O2)_n C10 H15 O8 P

CCI PMS

PAGE 1-A



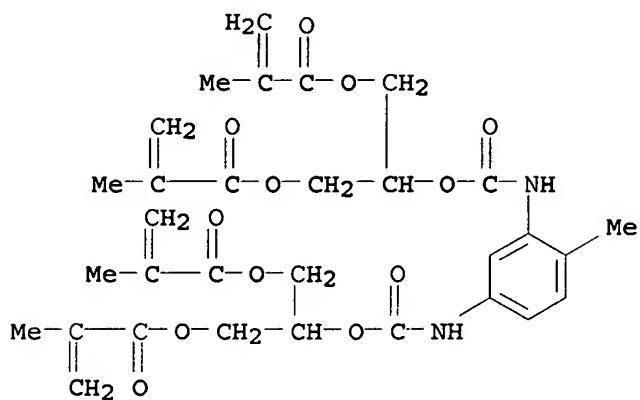
PAGE 1-B



CM 2

CRN 17520-30-8

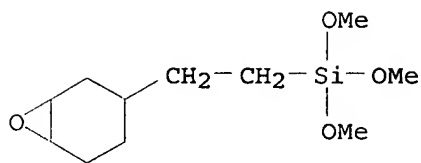
CMF C31 H38 N2 O12



CM 3

CRN 3388-04-3

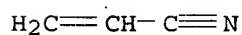
CMF C11 H22 O4 Si



CM 4

CRN 107-13-1

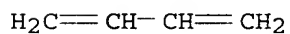
CMF C3 H3 N



CM 5

CRN 106-99-0

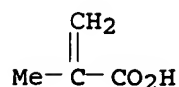
CMF C4 H6



CM 6

CRN 79-41-4

CMF C4 H6 O2



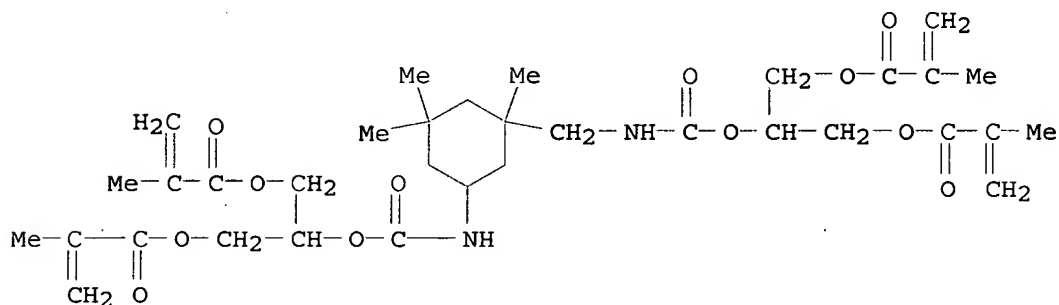
RN 294211-36-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, ω,ω' -[phosphinicobis(oxy)]bis[α -[2-[(1-oxo-2-propenyl)oxy]ethyl]poly[oxy(1-oxo-1,6-hexanediyl)]]], 2-propenenitrile, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane and 2-[[[[[1,3,3-trimethyl-5-[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]-1-[(2-methyl-1-oxo-2-propenyl)oxy]methyl]ethoxy]carbonyl]amino]cyclohexyl]methyl]amino]carbonyl]oxy]-1,3-propanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 294211-35-1

CMF C34 H50 N2 O12



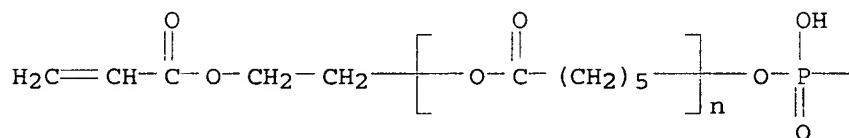
CM 2

CRN 294211-29-3

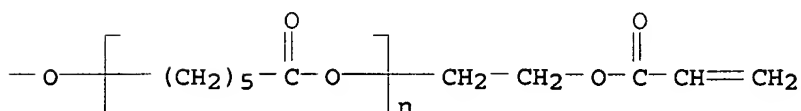
CMF (C6 H10 O2)_n (C6 H10 O2)_n C10 H15 O8 P

CCI PMS

PAGE 1-A



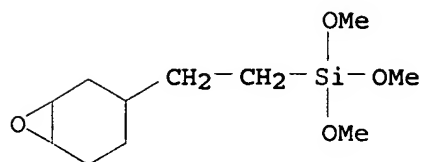
PAGE 1-B



CM 3

CRN 3388-04-3

CMF C11 H22 O4 Si



CM 4

CRN 107-13-1

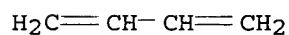
CMF C3 H3 N



CM 5

CRN 106-99-0

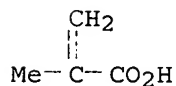
CMF C4 H6



CM 6

CRN 79-41-4

CMF C4 H6 O2



RN 294211-37-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, (4-methyl-1,3-phenylene)bis[iminocarbonyloxy[2,2-bis[(1-oxo-2-propenyl)oxy]methyl]-3,1-propanediyl]] di-2-propenoate, ω,ω'-[phosphinicobis(oxy)]bis[α-[2-[(1-oxo-2-propenyl)oxy]ethyl]poly[oxy(1-oxo-1,6-hexanediyl)]]], 2-propenenitrile and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

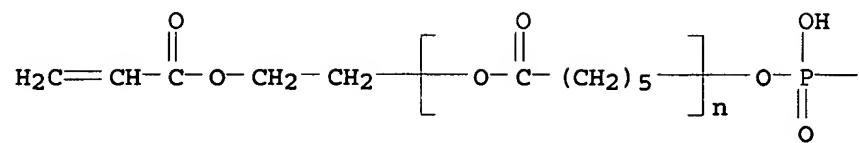
CM 1

CRN 294211-29-3

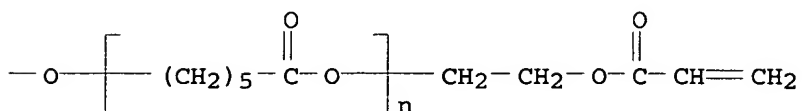
CMF (C6 H10 O2)_n (C6 H10 O2)_n C10 H15 O8 P

CCI PMS

PAGE 1-A



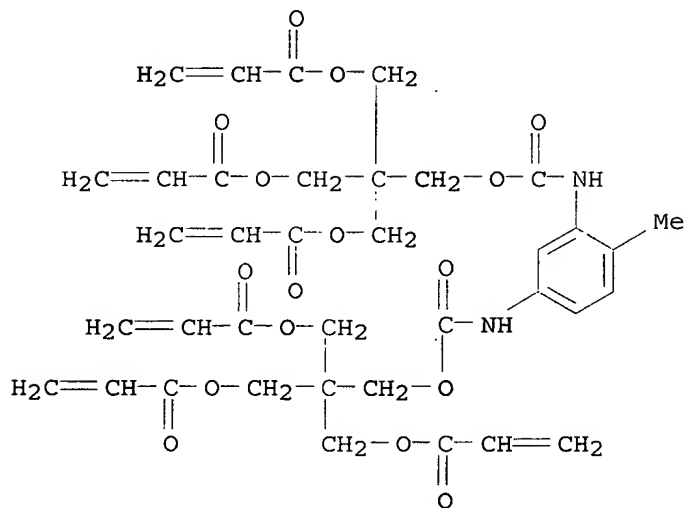
PAGE 1-B



CM 2

CRN 50843-44-2

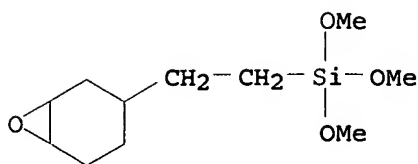
CMF C37 H42 N2 O16



CM 3

CRN 3388-04-3

CMF C11 H22 O4 Si



CM 4

CRN 107-13-1

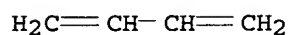
CMF C3 H3 N



CM 5

CRN 106-99-0

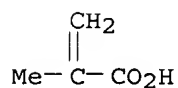
CMF C4 H6



CM 6

CRN 79-41-4

CMF C4 H6 O2



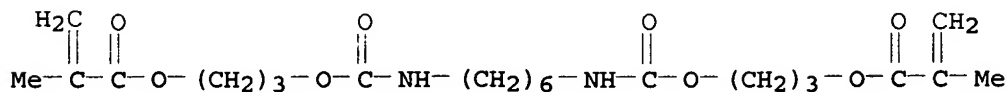
RN 294211-39-5 HCAPLUS

CN 11,15-Dioxa-2,9-diazaoctadec-17-enoic acid, 17-methyl-10,16-dioxo-, 3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with 1,3-butadiene, 2-methyl-2-propenoic acid, ω,ω' -[phosphinicobis(oxy)]bis[α -[2-[(1-oxo-2-propenyl)oxy]ethyl]poly[oxy(1-oxo-1,6-hexanediyl)]]], 2-propenenitrile and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 294211-38-4

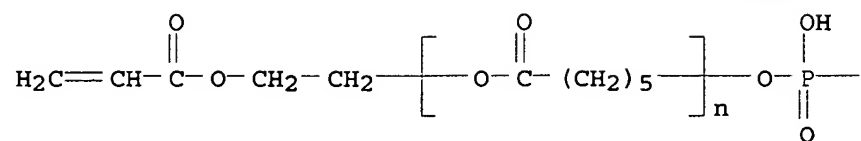
CMF C22 H36 N2 O8



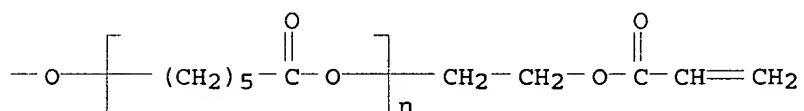
CM 2

CRN 294211-29-3
 CMF (C6 H10 O2)n (C6 H10 O2)n C10 H15 O8 P
 CCI PMS

PAGE 1-A

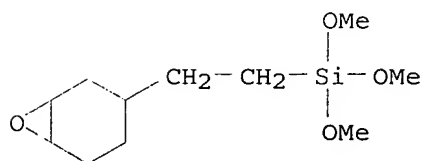


PAGE 1-B



CM 3

CRN 3388-04-3
 CMF C11 H22 O4 Si



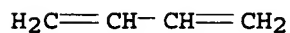
CM 4

CRN 107-13-1
 CMF C3 H3 N



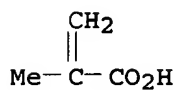
CM 5

CRN 106-99-0
 CMF C4 H6



CM 6

CRN 79-41-4
CMF C4 H6 O2

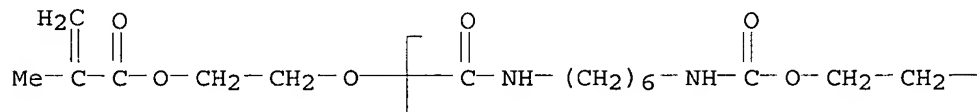


RN 294211-41-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene,
 α -(16-methyl-1,10,15-trioxo-11,14-dioxa-2,9-diazaheptadec-16-en-1-yl)- ω -[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]poly(oxy-1,2-ethanediyl)oxycarbonylimino-1,6-hexanediyliminocarbonyl),
 ω,ω' -[phosphinicobis(oxy)]bis[α -[2-[(1-oxo-2-propenyl)oxy]ethyl]poly[oxy(1-oxo-1,6-hexanediyl)]]], 2-propenenitrile and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

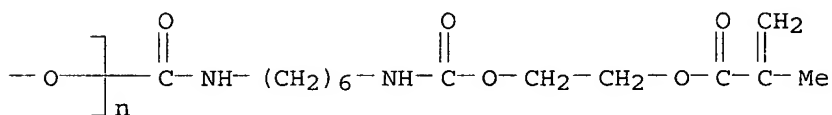
CM 1

CRN 294211-40-8
CMF (C10 H18 N2 O4)_n C20 H32 N2 O8
CCI PMS

PAGE 1-A



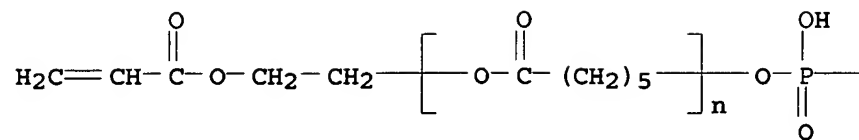
PAGE 1-B



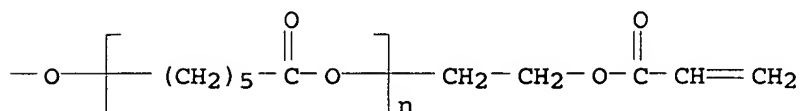
CM 2

CRN 294211-29-3
CMF (C6 H10 O2)_n (C6 H10 O2)_n C10 H15 O8 P
CCI PMS

PAGE 1-A



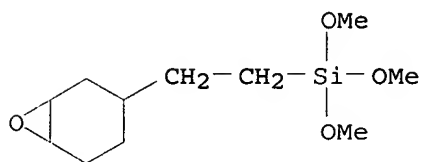
PAGE 1-B



CM 3

CRN 3388-04-3

CMF C11 H22 O4 Si



CM 4

CRN 107-13-1

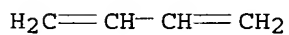
CMF C3 H3 N



CM 5

CRN 106-99-0

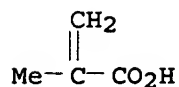
CMF C4 H6



CM 6

CRN 79-41-4

CMF C4 H6 O2

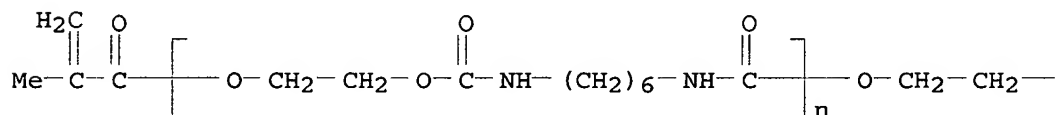


RN 294211-43-1 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene,
 α -(2-methyl-1-oxo-2-propenyl)- ω -[2-[(2-methyl-1-oxo-2-
 propenyl)oxy]ethoxy]poly(oxy-1,2-ethanediylloxycarbonylimino-1,6-
 hexanediyliminocarbonyl), ω,ω' -[phosphinicobis(oxy)]bis[.alpha
 .-[2-[(1-oxo-2-propenyl)oxy]ethyl]poly[oxy(1-oxo-1,6-hexanediyl)]],
 2-propenenitrile and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-
 yl)ethyl]silane (9CI) (CA INDEX NAME)

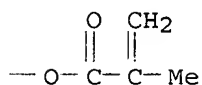
CM 1

CRN 294211-42-0
 CMF (C10 H18 N2 O4)_n C10 H14 O4
 CCI PMS

PAGE 1-A



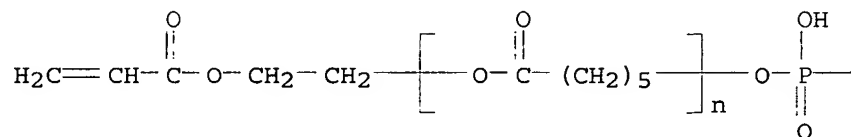
PAGE 1-B



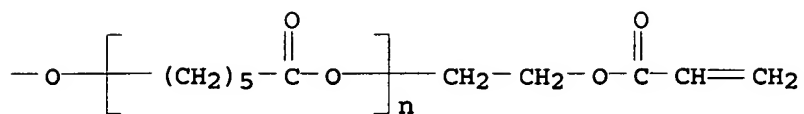
CM 2

CRN 294211-29-3
 CMF (C6 H10 O2)_n (C6 H10 O2)_n C10 H15 O8 P
 CCI PMS

PAGE 1-A



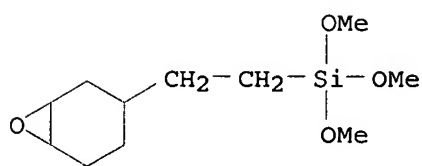
PAGE 1-B



CM 3

CRN 3388-04-3

CMF C11 H22 O4 Si



CM 4

CRN 107-13-1

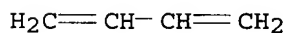
CMF C3 H3 N



CM 5

CRN 106-99-0

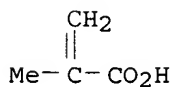
CMF C4 H6



CM 6

CRN 79-41-4

CMF C4 H6 O2



RN 294865-01-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene,
 α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl) polymer with
 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane

bis(2-methyl-2-propenoate), ω, ω' -[phosphinicobis(oxy)]bis[.alp
ha.-[2-[(1-oxo-2-propenyl)oxy]ethyl]poly[oxy(1-oxo-1,6-hexanediyl)]],
2-propenenitrile and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-
yl)ethyl]silane (9CI) (CA INDEX NAME)

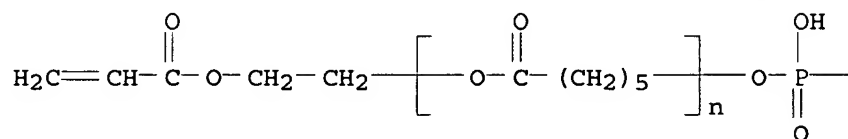
CM 1

CRN 294211-29-3

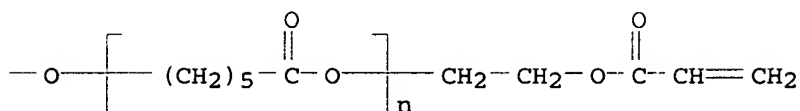
CMF (C6 H10 O2)n (C6 H10 O2)n C10 H15 O8 P

CCI PMS

PAGE 1-A



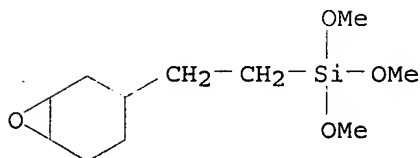
PAGE 1-B



CM 2

CRN 3388-04-3

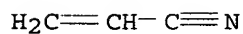
CMF C11 H22 O4 Si



CM 3

CRN 107-13-1

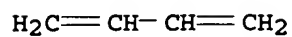
CMF C3 H3 N



CM 4

CRN 106-99-0

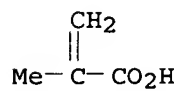
CMF C4 H6



CM 5

CRN 79-41-4

CMF C4 H6 O2



CM 6

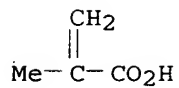
CRN 294865-00-2

CMF (C12 H18 N2 O2 . (C4 H8 O)n H2 O)x . 2 C4 H6 O2

CM 7

CRN 79-41-4

CMF C4 H6 O2



CM 8

CRN 39378-01-3

CMF (C12 H18 N2 O2 . (C4 H8 O)n H2 O)x

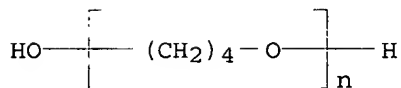
CCI PMS

CM 9

CRN 25190-06-1

CMF (C4 H8 O)n H2 O

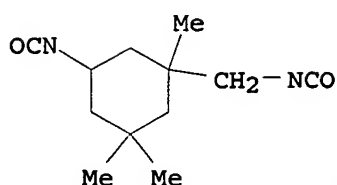
CCI PMS



CM 10

CRN 4098-71-9

CMF C12 H18 N2 O2



L39 ANSWER 35 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:579999 HCAPLUS

DN 133:178137

TI Heat-resistant epoxy resin compositions for insulating layers of multilayer printed circuit boards

IN Akimoto, Satoshi; Kawamoto, Kenji; Chino, Masaaki; Watanabe, Takuzo

PA Toppan Printing Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000230034	A2	20000822	JP 1999-31268	19990209
PRAI	JP 1999-31268		19990209		

AB The compns. comprise (A) UV-curable resins manufactured from saturated or unsatd.

polybasic acid anhydrides and reaction products of bisphenol epoxy resins with unsatd. monocarboxylic acids, (B) polyfunctional epoxy compds., (C) epoxy compds. containing ≥ 2 alicyclic epoxy groups, (D) epoxy compds. containing (meth)acryl groups, (E) radical photopolymer. initiators, (F) cationic photopolymer. initiators, (G) fillers, and (H) diluents. A composition comprising UV-curable resin (manufactured from Ripoxy

VR 90

and phthalic anhydride) 50, EHPE 3150 12, Celloxide 2021 5, M 100 (3,4-epoxycyclohexylmethyl methacrylate) 13, fine silica 15, leveling agent 1, Lucirin TPO 2, FX 512 2 parts, and propylene glycol monomethyl ether acetate was applied on a glass-epoxy board, dried, developed, and cured to give an insulating layer. A multilayer circuit board comprising the insulating layer and conductor wiring layer showed interlayer peeling strength 1.1 kg/cm and Tg 201°.

IC ICM C08G059-20

ICS C08G059-40; G03F007-027; G03F007-029; H05K003-46

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 76

IT 251653-46-0P, Celloxide 2021-EHPE 3150-3,4-epoxycyclohexylmethyl

methacrylate-Ripoxy VR 90 phthalate copolymer 288570-02-5P,

Celloxide 2081-EHPE 3150-3,4-epoxycyclohexylmethyl methacrylate-Ripoxy VR

90 phthalate copolymer 288570-03-6P, Celloxide 2083-EHPE

3150-3,4-epoxycyclohexylmethyl methacrylate-Ripoxy VR 90 phthalate

copolymer 288570-04-7P, EHPE 3150-3,4-epoxycyclohexylmethyl

methacrylate-Epoled GT 301-Ripoxy VR 90 phthalate copolymer

288570-05-8P, EHPE 3150-3,4-epoxycyclohexylmethyl

methacrylate-Epoled GT 401-Ripoxy VR 90 phthalate copolymer

RL: DEV (Device component use); IMF (Industrial manufacture); PRP

(Properties); TEM (Technical or engineered material use); PREP

(Preparation); USES (Uses)

(heat-resistant epoxy resin compns. for insulating layers of multilayer

printed circuit boards)
 IT 251653-46-0P, Celloxide 2021-EHPE 3150-3,4-epoxycyclohexylmethyl methacrylate-Ripoxy VR 90 phthalate copolymer 288570-02-5P, Celloxide 2081-EHPE 3150-3,4-epoxycyclohexylmethyl methacrylate-Ripoxy VR 90 phthalate copolymer 288570-03-6P, Celloxide 2083-EHPE 3150-3,4-epoxycyclohexylmethyl methacrylate-Ripoxy VR 90 phthalate copolymer 288570-04-7P, EHPE 3150-3,4-epoxycyclohexylmethyl methacrylate-Epolead GT 301-Ripoxy VR 90 phthalate copolymer 288570-05-8P, EHPE 3150-3,4-epoxycyclohexylmethyl methacrylate-Epolead GT 401-Ripoxy VR 90 phthalate copolymer
 RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (heat-resistant epoxy resin compns. for insulating layers of multilayer printed circuit boards)
 RN 251653-46-0 HCAPLUS
 CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer hydrogen 1,2-benzenedicarboxylate di-2-propenoate and 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 244772-00-7

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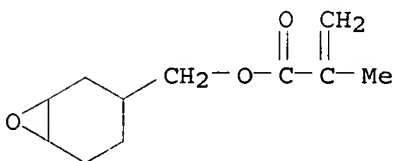
CCI IDS, PMS, MAN

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CRN 82428-30-6

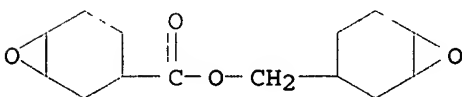
CMF C11 H16 O3



CM 3

CRN 2386-87-0

CMF C14 H20 O4



CM 4

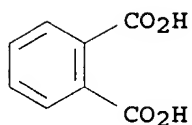
CRN 251653-45-9

CMF (C21 H24 O4)x . x C8 H6 O4 . 2 C3 H4 O2

CM 5

CRN 88-99-3

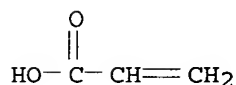
CMF C8 H6 O4



CM 6

CRN 79-10-7

CMF C3 H4 O2



CM 7

CRN 25085-99-8

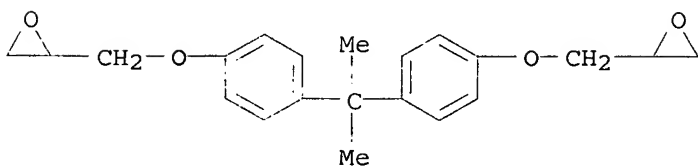
CMF (C21 H24 O4)x

CCI PMS

CM 8

CRN 1675-54-3

CMF C21 H24 O4



RN 288570-02-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer hydrogen 1,2-benzenedicarboxylate di-2-propenoate and α -(7-oxabicyclo[4.1.0]hept-3-ylmethyl)- ω -[(7-oxabicyclo[4.1.0]hept-3-ylcarbonyl)oxy]poly[oxy(1-oxo-1,6-hexanediyl)]

(9CI) (CA INDEX NAME)

CM 1

CRN 244772-00-7

CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3

CCI IDS, PMS, MAN

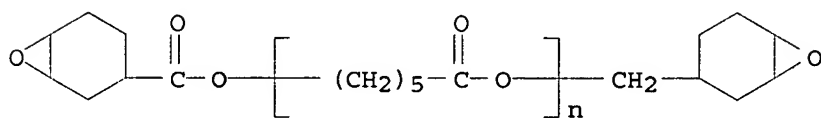
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 139198-19-9

CMF (C6 H10 O2)n C14 H20 O4

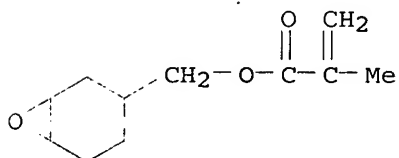
CCI PMS



CM 3

CRN 82428-30-6

CMF C11 H16 O3



CM 4

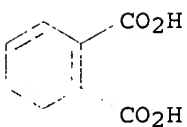
CRN 251653-45-9

CMF (C21 H24 O4)x . x C8 H6 O4 . 2 C3 H4 O2

CM 5

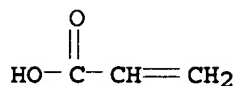
CRN 88-99-3

CMF C8 H6 O4



CM 6

CRN 79-10-7
CMF C3 H4 O2

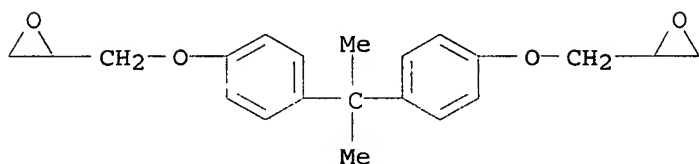


CM 7

CRN 25085-99-8
CMF (C21 H24 O4)x
CCI PMS

CM 8

CRN 1675-54-3
CMF C21 H24 O4



RN 288570-03-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with Celloxide 2083, α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer hydrogen 1,2-benzenedicarboxylate di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 244772-00-7
CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3
CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

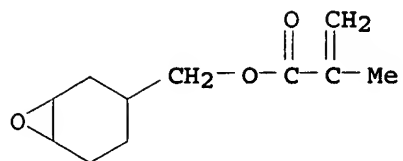
CM 2

CRN 146358-70-5
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 82428-30-6
CMF C11 H16 O3



CM 4

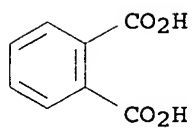
CRN 251653-45-9

CMF (C21 H24 O4)x . x C8 H6 O4 . 2 C3 H4 O2

CM 5

CRN 88-99-3

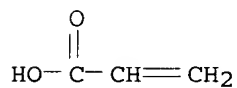
CMF C8 H6 O4



CM 6

CRN 79-10-7

CMF C3 H4 O2



CM 7

CRN 25085-99-8

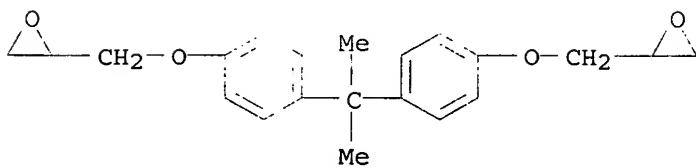
CMF (C21 H24 O4)x

CCI PMS

CM 8

CRN 1675-54-3

CMF C21 H24 O4



RN 288570-04-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with Epolead GT 301, α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer hydrogen 1,2-benzenedicarboxylate di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 244772-00-7

CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3

CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 163913-07-3

CMF Unspecified

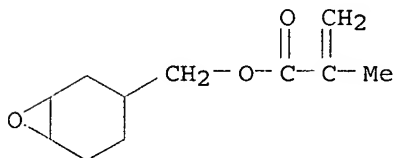
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 82428-30-6

CMF C11 H16 O3



CM 4

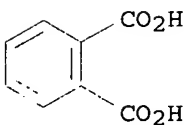
CRN 251653-45-9

CMF (C21 H24 O4)x . x C8 H6 O4 . 2 C3 H4 O2

CM 5

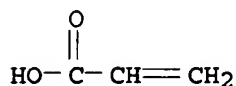
CRN 88-99-3

CMF C8 H6 O4



CM 6

CRN 79-10-7
CMF C3 H4 O2

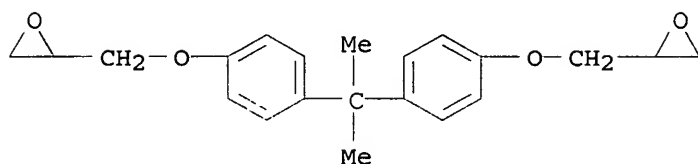


CM 7

CRN 25085-99-8
CMF (C21 H24 O4)x
CCI PMS

CM 8

CRN 1675-54-3
CMF C21 H24 O4



RN 288570-05-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with Epolead GT 401, α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer hydrogen 1,2-benzenedicarboxylate di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 244772-00-7
CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3
CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

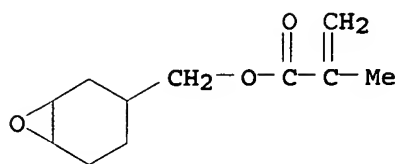
CM 2

CRN 149984-16-7
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 82428-30-6
CMF C11 H16 O3



CM 4

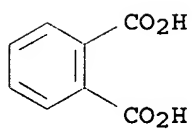
CRN 251653-45-9

CMF (C21 H24 O4)x . x C8 H6 O4 . 2 C3 H4 O2

CM 5

CRN 88-99-3

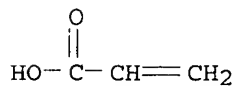
CMF C8 H6 O4



CM 6

CRN 79-10-7

CMF C3 H4 O2



CM 7

CRN 25085-99-8

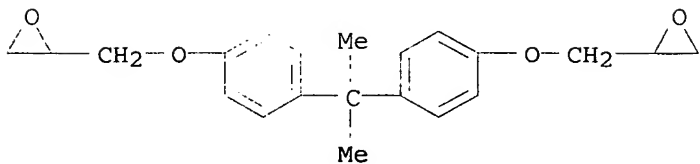
CMF (C21 H24 O4)x

CCI PMS

CM 8

CRN 1675-54-3

CMF C21 H24 O4



L39 ANSWER 36 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:526754 HCAPLUS

DN 133:121407

TI Photocurable and thermosetting electrically insulating polymer compositions with improved storage stability and multilayer printed circuit boards using them

IN Kawamoto, Kenji; Watanabe, Jiro; Sato, Hiroshi; Takemoto, Masayuki

PA Toppan Printing Co., Ltd., Japan; Nippon Oil and Fats Co., Ltd.; NOF Corporation

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 2000212248	A2	20000802	JP 1999-12953	19990121
	JP 3710945	B2	20051026		
PRAI	JP 1999-12953		19990121		

AB The compns., which are developable with diluted alkali solns., contain (A) UV-curable polymers prepared by reaction of aliphatic vinyl ethers with polycarboxylic acids, which are obtained by reaction of epoxy resins with unsatd. monocarboxylic acids and then with (un)saturated polybasic acid anhydrides, to block CO₂H groups, (B) polyfunctional epoxy resins as thermosetting components, and (C) photopolymn. initiators. Thus, 200 parts polycarboxylic acid prepared by reaction of Ripoxy VR 90 (bisphenol A epoxy resin acrylate) and phthalic anhydride (acid value \approx 178 mg-KOH/g) reacted with 82 parts Pr vinyl ether to give a UV-curable polymer, which was blended with SiO₂ 120, e,4-epoxycyclohexylmethyl methacrylate 85, EHPE 3150 (epoxy resin) 74, a leveling agent 2, and TPO (photopolymn. initiator) 214 parts in 3-methoxybutyl acetate to give a photosensitive solution, which showed viscosity improvement \leq 20% after 20 days from the initial value and gave multilayer printed circuit boards with high resolution, good developability with alkali developers, and high adhesion strength to Cu foils.

IC ICM C08G059-14

ICS C08G059-20; C09D005-25; C09D163-00; G03F007-027; H05K003-46

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

IT 285992-12-3P, Ripoxy VR 90 ester with phthalic anhydride

, polymer with EHPE 3150 and 3,4-epoxycyclohexylmethyl methacrylate

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(photocurable and thermosetting elec. insulating polymer compns. with improved storage stability for multilayer printed circuit boards)

IT 111-34-2DP, Butyl vinyl ether, reaction products with bisphenol A epoxy acrylate phthalate 764-47-6DP, Propyl vinyl ether, reaction products with bisphenol A epoxy acrylate phthalate 2182-55-0DP, Cyclohexyl vinyl ether, reaction products with bisphenol A epoxy acrylate phthalate 251653-45-9DP, Ripoxy VR 90 ester with phthalic anhydride, reaction products with alkyl vinyl ethers

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(photocurable and thermosetting elec. insulating polymer compns. with improved storage stability for multilayer printed circuit boards)

IT 285992-12-3P, Ripoxy VR 90 ester with phthalic anhydride

, polymer with EHPE 3150 and 3,4-epoxycyclohexylmethyl methacrylate

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or

engineered material use); **PREP** (Preparation); **USES** (Uses)
 (photocurable and thermosetting elec. insulating polymer compns. with
 improved storage stability for multilayer printed circuit boards)

RN 285992-12-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester,
 polymer with α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-
 cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol
 (3:1), and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[ox
 irane] homopolymer hydrogen 1,2-benzenedicarboxylate di-2-propenoate (9CI)
 (CA INDEX NAME)

CM 1

CRN 244772-00-7

CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3

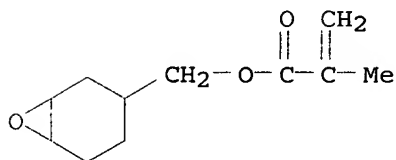
CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 82428-30-6

CMF C11 H16 O3



CM 3

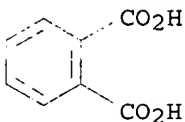
CRN 251653-45-9

CMF (C21 H24 O4)x . x C8 H6 O4 . 2 C3 H4 O2

CM 4

CRN 88-99-3

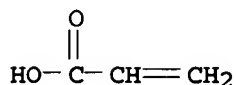
CMF C8 H6 O4



CM 5

CRN 79-10-7

CMF C3 H4 O2



CM 6

CRN 25085-99-8

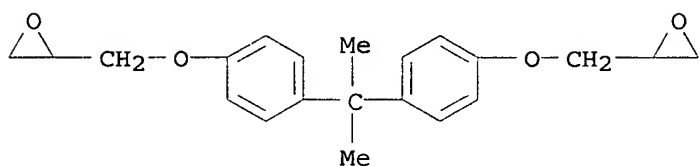
CMF (C21 H24 O4)x

CCI PMS

CM 7

CRN 1675-54-3

CMF C21 H24 O4



L39 ANSWER 37 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:272008 HCAPLUS

DN 132:294882

TI Flame- and heat-resistant photopolymer compositions and multilayer printed circuit boards using them

IN Akimoto, Satoshi; Chino, Masaaki; Murai, Toshiyori; Kawamoto, Kenji; Oide, Masayuki

PA Toppan Printing Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000119374	A2	20000425	JP 1998-294250	19981015
PRAI	JP 1998-294250		19981015		

AB The comps., useful for elec. insulating layers of multilayer printed circuit boards, contain (A) UV-curable resins prepared by reaction of (un)saturated polybasic acid **anhydrides** with reaction products of bisphenol-type epoxy resins with unsatd. monocarboxylic acids, (B) polyfunctional epoxy compds., (C) tetrabromobisphenol A-type epoxy compds., (D) photochem. radical initiators, and (E) fillers. Thus, a composition containing a UV-curable resin from Ripoxy VR 90 and phthalic **anhydride** 45, EHPE 3150 15, M 100 (epoxy ester) 15, Epikote 5050 10, powdered SiO₂ 10, a leveling agent 1, and TPO (initiator) 4 parts was applied on a patterned Cu-clad glass epoxy substrate, exposed to light through a photomask, developed, thermally cured to form a film (T_g 202°, UL-94 flame retardance rating V-0), and Cu-plated to give a multilayer printed circuit board showing peel strength 1.1 kg/cm.

IC ICM C08G059-40

ICS G03F007-027; H05K003-46

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

IT 264263-83-4P, EHPE 3150-Epikote 5050-M 100 (epoxy ester)-Ripox VR
90 phthalic anhydride ester copolymer

RL: DEV (Device component use); IMF (Industrial manufacture); PRP
(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)

(dielec. flame- and heat-resistant photocurable epoxy acrylate compns.
for multilayer printed circuit boards)

IT 264263-83-4P, EHPE 3150-Epikote 5050-M 100 (epoxy ester)-Ripox VR
90 phthalic anhydride ester copolymer

RL: DEV (Device component use); IMF (Industrial manufacture); PRP
(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)

(dielec. flame- and heat-resistant photocurable epoxy acrylate compns.
for multilayer printed circuit boards)

RN 264263-83-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester,
polymer with α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-
cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol
(3:1), 2,2'-[(1-methylethylidene)bis[(2,6-dibromo-4,1-
phenylene)oxymethylene]]bis[oxirane] and 2,2'-[(1-methylethylidene)bis(4,1-
phenylene)oxymethylene]]bis[oxirane] homopolymer hydrogen
1,2-benzenedicarboxylate di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 244772-00-7

CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3

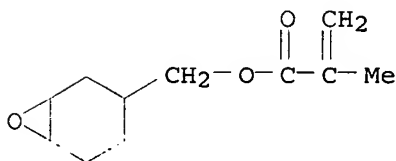
CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 82428-30-6

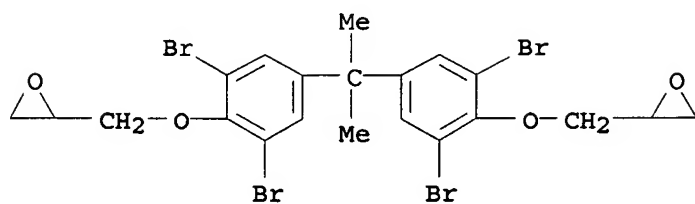
CMF C11 H16 O3



CM 3

CRN 3072-84-2

CMF C21 H20 Br4 O4



CM 4

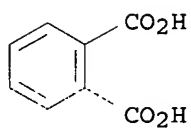
CRN 251653-45-9

CMF (C21 H24 O4)x . x C8 H6 O4 . 2 C3 H4 O2

CM 5

CRN 88-99-3

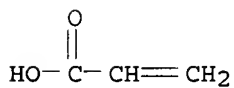
CMF C8 H6 O4



CM 6

CRN 79-10-7

CMF C3 H4 O2



CM 7

CRN 25085-99-8

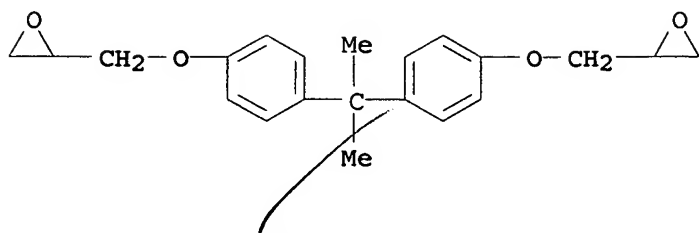
CMF (C21 H24 O4)x

CCI PMS

CM 8

CRN 1675-54-3

CMF C21 H24 O4



L39 ANSWER 38 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:139003 HCAPLUS

DN 132:181627

TI Sealing of semiconductor devices with acrylate polymer compositions by reactive injection molding

IN Taketa, Toshio

PA Sumitomo Bakelite Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000061974	A2	20000229	JP 1998-230811	19980817
PRAI	JP 1998-230811		19980817		

AB Semiconductor devices are sealed by reactive injection molding with compns. containing (A) reaction products of $[\text{CH}_2:\text{CRCO}_2(\text{CH}_2)_2[\text{OCO}(\text{CH}_2)_5\text{a}] \text{cOP}(\text{OH})\text{b}]$ ($\text{R} = \text{H}, \text{Me}$; $\text{a}, \text{b}, \text{c} = 0, 1$; $\text{b} + \text{c} = 3$) with alicyclic epoxy-containing alkoxysilanes and $\text{CH}_2:\text{CR}_2\text{CO}_2\text{R}_1$ ($\text{R}_1 = \text{alicyclic and/or aromatic group-containing } \text{C}_{\geq 10}$ substituent; $\text{R}_2 = \text{H}, \text{Me}$) at $0-50^\circ$, (B) urethane di(meth)acrylates prepared by reaction of hydroxyalkyl(meth)acrylic acids, polyalkylene glycols, and diisocyanates, (C) polymerization initiators, and (D) inorg. fillers. Thus, (A) a composition containing 25 parts varnish containing AMP

20GY (phenoxydiethylene glycol monoacrylate) 25, A-L4 (ethoxylated 2-phenylphenol monoacrylate) 25, Kayamer PM 21 (phosphoric acid group-containing methacrylate) 1, and KBM 303 (alicyclic epoxy alkoxysilane) 0.5 part, 65 parts FB 30 (SiO_2 filler), and 10 parts SO 25R (SiO_2 filler) and (B) another composition containing M 1600 (urethane diacrylate prepared from hydroxyethyl acrylate, polybutylene glycol, and IPDI) 25, Percumyl ND (cumyl peroxyneodecanoate) 1.0, FB 30 65, and SO 25R 10 parts were blended at 1:1, polymerized in a mold at 150° for 5 min to give a polymer which well sealed semiconductor devices.

IC ICM B29C045-00

ICS B29C045-14; C08F299-06; H01L023-29; H01L023-31; B29L031-34

CC 38-2 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

IT 230615-99-3P, AMP 20GY-2-hydroxyethyl acrylate-isophorone diisocyanate-Kayamer PM 21-KBM 303-oxirane 2-phenylphenyl ether acrylate-polybutylene glycol copolymer 232922-10-0P, AMP 20GY-Aronix M 1600-Kayamer PM 21-KBM 303-oxirane 2-phenylphenyl ether acrylate copolymer

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(sealing of semiconductor devices with acrylate polymer compns. by reactive injection molding)

IT 230615-99-3P, AMP 20GY-2-hydroxyethyl acrylate-isophorone diisocyanate-Kayamer PM 21-KBM 303-oxirane 2-phenylphenyl ether

acrylate-polybutylene glycol copolymer 232922-10-0P, AMP
20GY-Aronix M 1600-Kayamer PM 21-KBM 303-oxirane 2-phenylphenyl ether
acrylate copolymer

RL: DEV (Device component use); IMF (Industrial manufacture); **PREP**
(Preparation); USES (Uses)

(sealing of semiconductor devices with acrylate polymer compns. by
reactive injection molding)

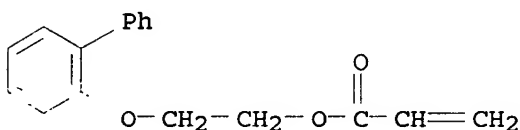
RN 230615-99-3 HCAPLUS

CN 2-Propenoic acid, 2-([1,1'-biphenyl]-2-yloxy)ethyl ester, polymer with
 α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl
2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-
trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl
6-hydroxyhexanoate phosphate, 2-(2-phenoxyethoxy)ethyl 2-propenoate and
trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX
NAME)

CM 1

CRN 91442-24-9

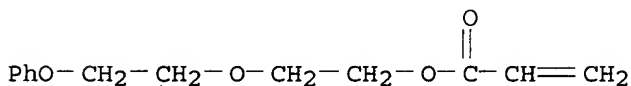
CMF C17 H16 O3



CM 2

CRN 61630-25-9

CMF C13 H16 O4

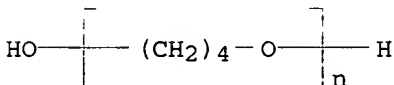


CM 3

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

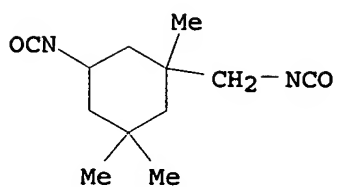
CCI PMS



CM 4

CRN 4098-71-9

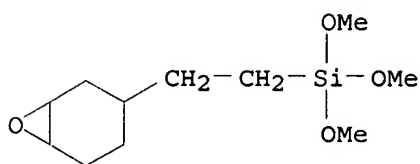
CMF C12 H18 N2 O2



CM 5

CRN 3388-04-3

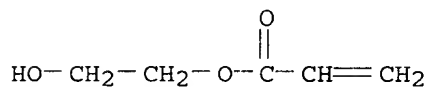
CMF C11 H22 O4 Si



CM 6

CRN 818-61-1

CMF C5 H8 O3



CM 7

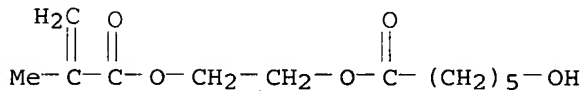
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 8

CRN 85099-10-1

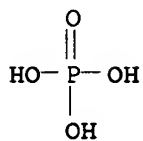
CMF C12 H20 O5



CM 9

CRN 7664-38-2

CMF H3 O4 P



RN 232922-10-0 HCAPLUS

CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-([1,1'-biphenyl]-2-yloxy)ethyl 2-propenoate, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 100629-45-6

CMF Unspecified

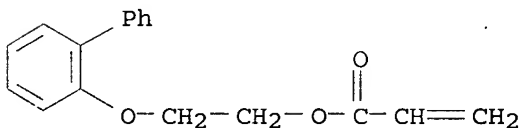
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 91442-24-9

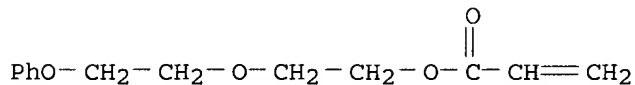
CMF C17 H16 O3



CM 3

CRN 61630-25-9

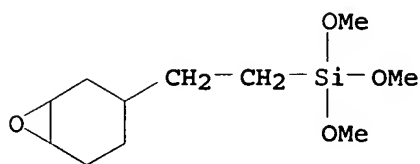
CMF C13 H16 O4



CM 4

CRN 3388-04-3

CMF C11 H22 O4 Si



CM 5

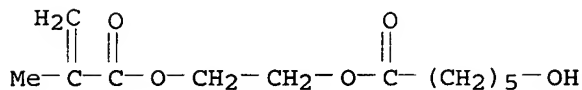
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 6

CRN 85099-10-1

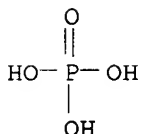
CMF C12 H20 O5



CM 7

CRN 7664-38-2

CMF H3 O4 P



L39 ANSWER 39 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:772701 HCAPLUS

DN 132:23652

TI Moisture-resistant die-attaching pastes for semiconductors

IN Sakamoto, Yuji; Ando, Katsutoshi

PA Sumitomo Bakelite Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11335630	A2	19991207	JP 1998-146165	19980527
	JP 3503736	B2	20040308		
PRAI	JP 1998-146165		19980527		

AB Pastes contain (A) urethane di(meth)acrylates from the reaction of hydroxyalkyl (meth)acrylates, polyalkylene glycols, and diisocyanates, (B) (meth)acrylic-modified polybutadienes, (C) CH₂=CHCO₂R₁ (R₁ = >C₁₀)

substituents containing alicyclic and/or aromatic groups), (D) $[\text{CH}_2=\text{CHCO}_2(\text{CH}_2)_2(\text{O}_2\text{C}(\text{CH}_2)_5)_a]\text{COPO}(\text{OH})_b$ ($a = 0$ or 1 , $b = 1$ or 2 , $c = 1$ or 2 , and $b + c = 3$) or a corresponding methacrylate, (E) alkoxysilanes containing alicyclic epoxy groups, (F) organic peroxides or azo compds., and

(G)

Ag powder at weight ratios $[a] 1 \leq (A) / (B) \leq 25$, $[b] 0.3 \leq \{(A) + (B)\} / (C) \leq 6.0$, $[c] 0.001 \leq \{(D) + (E)\} / \{(A) + (B) + (C)\} \leq 0.05$, $[d] 0.1 \leq (D) / (E) \leq 10$, $[e] 0.001 \leq (F) / \{(A) + (B) + (C)\} \leq 0.05$. Thus, a paste was prepared from Aronix M 1600 23.75, Nisseki MM 1000 80 1.25, AMP 20GY 25, Kayamer PM21 0.5, KBM 303 0.25, Percumyl ND 0.5, SF 65 130, and TCG 1 20 parts.

IC ICM C09J004-02

ICS C09J009-02; C09J011-00; C09J115-00; C09J143-02; C09J175-14; H01L021-52

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

IT 3388-04-3DP, KBM 303, polymers with methacrylate and methacrylate phosphates and methacrylic-modified polybutadiene and urethane diacrylates 9003-17-2DP, Polybutadiene, acrylic-modified, polymers with alkoxysilanes and methacrylate phosphates and monoacrylate and urethane diacrylates 61630-25-9DP, AMP 20GY, polymers with alkoxysilanes and methacrylate phosphates and methacrylic-modified polybutadiene and urethane diacrylates 103370-83-8DP, Kayamer PM21, polymers with alkoxysilanes and methacrylates and methacrylic-modified polybutadiene and urethane diacrylates 188793-72-8DP, Nisseki MM 1000 80, polymers with alkoxysilanes and methacrylate phosphates and monoacrylate and urethane diacrylates 252186-29-1P 252186-30-4P 252186-31-5P 252186-32-6P 252186-33-7P 252186-34-8P, AMP 20GY-2-hydroxyethyl acrylate-isophorone diisocyanate-Kayamer PM21-KBM 303-Nisseki MM 1000 80-polybutylene glycol copolymer 252186-35-9P 252186-36-0P 252186-37-1P 252186-38-2P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(moisture-resistant die-attaching pastes containing urethane di(meth)acrylates and (meth)acrylic-modified polybutadienes and (meth)acrylates and (meth)acrylate phosphates and alkoxysilanes and silver powder for semiconductors)

IT 252186-29-1P 252186-30-4P 252186-31-5P

252186-32-6P 252186-33-7P 252186-34-8P, AMP

20GY-2-hydroxyethyl acrylate-isophorone diisocyanate-Kayamer PM21-KBM

303-Nisseki MM 1000 80-polybutylene glycol copolymer 252186-35-9P

252186-36-0P 252186-37-1P 252186-38-2P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP

(Properties); TEM (Technical or engineered material use); PREP

(Preparation); USES (Uses)

(moisture-resistant die-attaching pastes containing urethane di(meth)acrylates and (meth)acrylic-modified polybutadienes and (meth)acrylates and (meth)acrylate phosphates and alkoxysilanes and silver powder for semiconductors)

RN 252186-29-1 HCAPLUS

CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, Nisseki MM 1000-80, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 188793-72-8

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 100629-45-6

CMF Unspecified

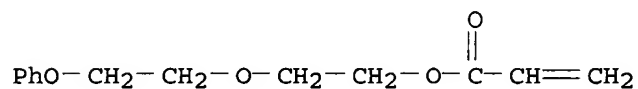
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 61630-25-9

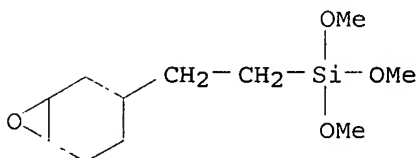
CMF C13 H16 O4



CM 4

CRN 3388-04-3

CMF C11 H22 O4 Si



CM 5

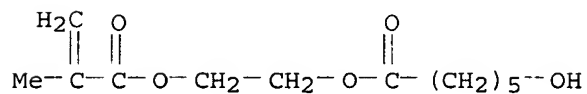
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 6

CRN 85099-10-1

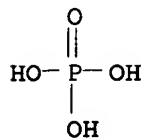
CMF C12 H20 O5



CM 7

CRN 7664-38-2

CMF H3 O4 P



RN 252186-30-4 HCAPLUS

CM Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, MAC 1000-80, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 116134-38-4

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 100629-45-6

CMF Unspecified

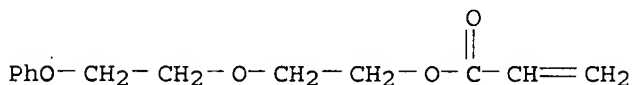
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 61630-25-9

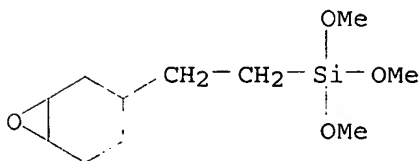
CMF C13 H16 O4



CM 4

CRN 3388-04-3

CMF C11 H22 O4 Si

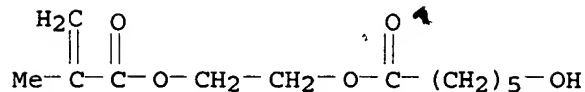


CM 5

CRN 103370-83-8
CMF C12 H20 O5 . x H3 O4 P

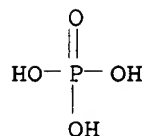
CM 6

CRN 85099-10-1
CMF C12 H20 O5



CM 7

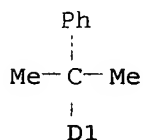
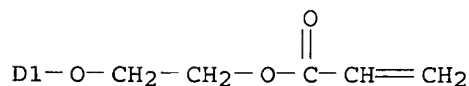
CRN 7664-38-2
CMF H3 O4 P



RN 252186-31-5 HCAPLUS
CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-[(1-methyl-1-phenylethyl)phenoxy]ethyl 2-propenoate, Nisseki MM 1000-80 and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 229325-28-4
CMF C20 H22 O3
CCI IDS



CM 2

CRN 188793-72-8
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

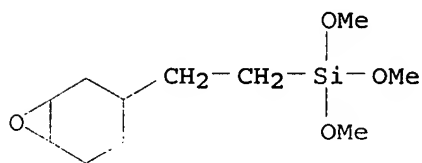
CM 3

CRN 100629-45-6
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 3388-04-3
CMF C11 H22 O4 Si

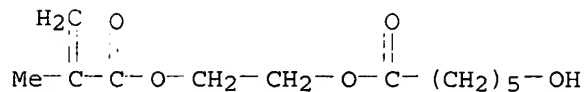


CM 5

CRN 103370-83-8
CMF C12 H20 O5 . x H3 O4 P

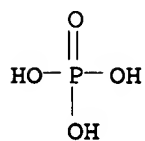
CM 6

CRN 85099-10-1
CMF C12 H20 O5



CM 7

CRN 7664-38-2
CMF H3 O4 P



RN 252186-32-6 HCAPLUS

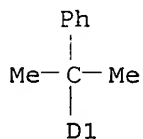
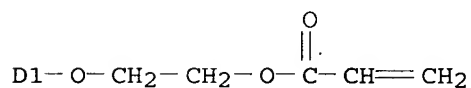
CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, MAC 1000-80, 2-[(1-methyl-1-phenylethyl)phenoxy]ethyl 2-propenoate, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 229325-28-4

CMF C20 H22 O3

CCI IDS



CM 2

CRN 116134-38-4

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 100629-45-6

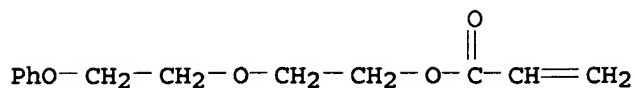
CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

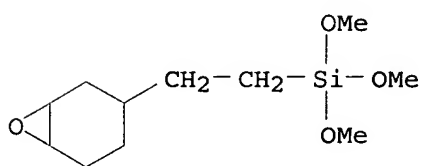
CM 4

CRN 61630-25-9
CMF C13 H16 O4



CM 5

CRN 3388-04-3
CMF C11 H22 O4 Si

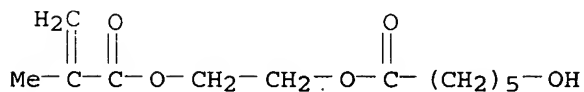


CM 6

CRN 103370-83-8
CMF C12 H20 O5 . x H3 O4 P

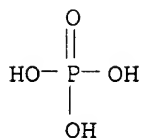
CM 7

CRN 85099-10-1
CMF C12 H20 O5



CM 8

CRN 7664-38-2
CMF H3 O4 P



RN 252186-33-7 HCAPLUS
CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-([1,1'-biphenyl]yloxy)ethyl 2-propenoate, Nisseki MM 1000-80, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA

INDEX NAME)

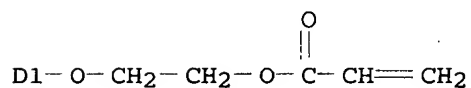
CM 1

CRN 188793-72-8
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 146191-39-1
CMF C17 H16 O3
CCI IDS



D1- Ph

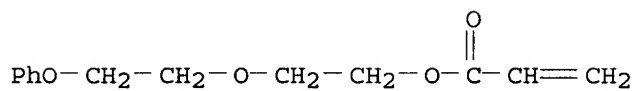
CM 3

CRN 100629-45-6
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

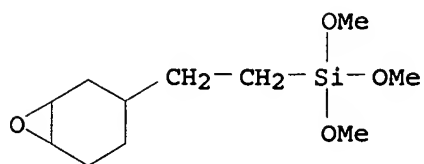
CM 4

CRN 61630-25-9
CMF C13 H16 O4



CM 5

CRN 3388-04-3
CMF C11 H22 O4 Si



CM 6

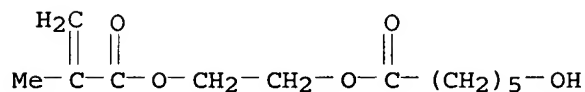
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 7

CRN 85099-10-1

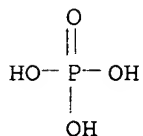
CMF C12 H20 O5



CM 8

CRN 7664-38-2

CMF H3 O4 P



RN 252186-34-8 HCAPLUS

CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, Nisseki MM 1000-80, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 188793-72-8

CMF Unspecified

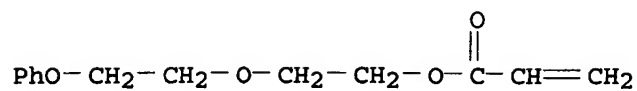
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 61630-25-9

CMF C13 H16 O4

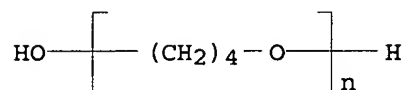


CM 3

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

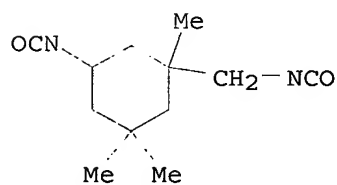
CCI PMS



CM 4

CRN 4098-71-9

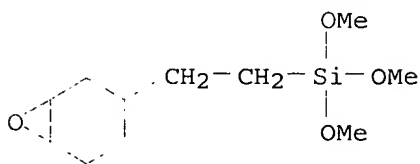
CMF C12 H18 N2 O2



CM 5

CRN 3388-04-3

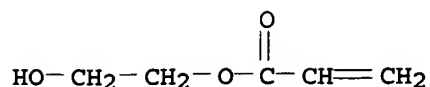
CMF C11 H22 O4 Si



CM 6

CRN 818-61-1

CMF C5 H8 O3



CM 7

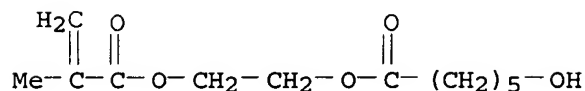
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 8

CRN 85099-10-1

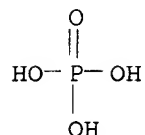
CMF C12 H20 O5



CM 9

CRN 7664-38-2

CMF H3 O4 P



RN 252186-35-9 HCAPLUS

CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, MAC 1000-80, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 116134-38-4

CMF Unspecified

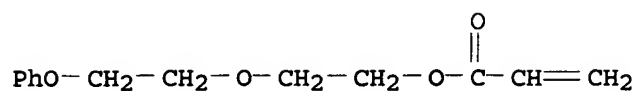
CCI PMS, MAN

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CM 2

CRN 61630-25-9

CMF C13 H16 O4

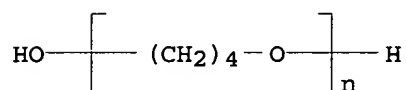


CM 3

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

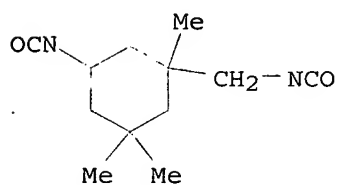
CCI PMS



CM 4

CRN 4098-71-9

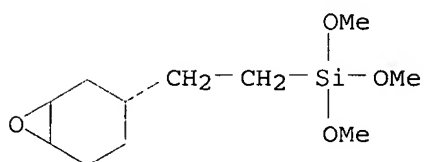
CMF C12 H18 N2 O2



CM 5

CRN 3388-04-3

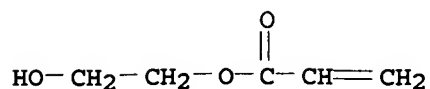
CMF C11 H22 O4 Si



CM 6

CRN 818-61-1

CMF C5 H8 O3



CM 7

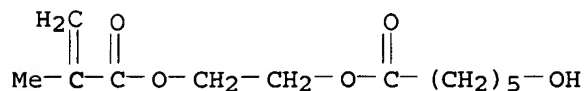
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 8

CRN 85099-10-1

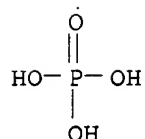
CMF C12 H20 O5



CM 9

CRN 7664-38-2

CMF H3 O4 P



RN 252186-36-0 HCAPLUS

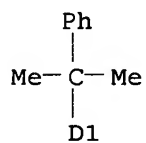
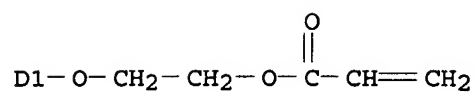
CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-[(1-methyl-1-phenylethyl)phenoxy]ethyl 2-propenoate, Nisseki MM 1000-80 and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 229325-28-4

CMF C20 H22 O3

CCI IDS



CM 2

CRN 188793-72-8

CMF Unspecified

CCI PMS, MAN

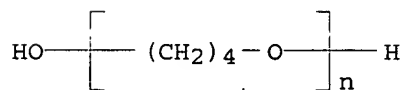
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 25190-06-1

CMF (C4 H8 O)n H2 O

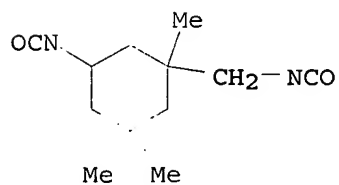
CCI PMS



CM 4

CRN 4098-71-9

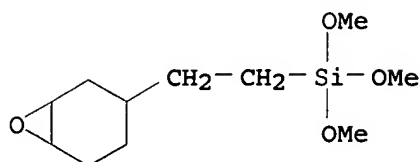
CMF C12 H18 N2 O2



CM 5

CRN 3388-04-3

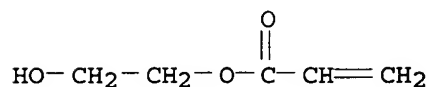
CMF C11 H22 O4 Si



CM 6

CRN 818-61-1

CMF C5 H8 O3



CM 7

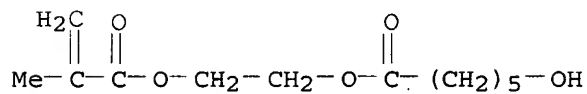
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 8

CRN 85099-10-1

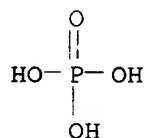
CMF C12 H20 O5



CM 9

CRN 7664-38-2

CMF H3 O4 P



RN 252186-37-1 HCAPLUS

CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, MAC 1000-80, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate phosphate, 2-[(1-methyl-1-phenylethyl)phenoxy]ethyl

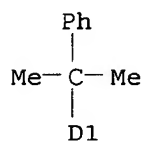
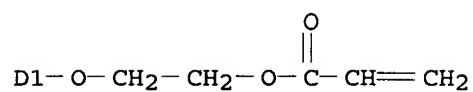
2-propenoate, 2-(2-phenoxyethoxy)ethyl 2-propenoate and
trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX
NAME)

CM 1

CRN 229325-28-4

CMF C20 H22 O3

CCI IDS



CM 2

CRN 116134-38-4

CMF Unspecified

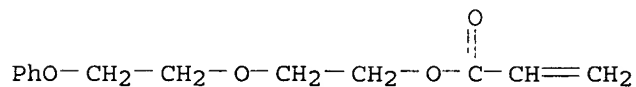
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 61630-25-9

CMF C13 H16 O4

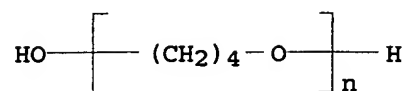


CM 4

CRN 25190-06-1

CMF (C4 H8 O)n H2 O

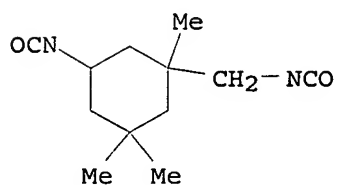
CCI PMS



CM 5

CRN 4098-71-9

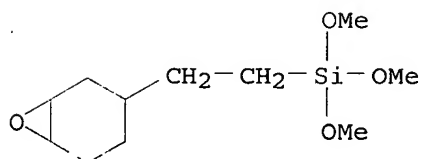
CMF C12 H18 N2 O2



CM 6

CRN 3388-04-3

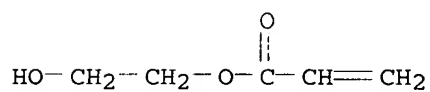
CMF C11 H22 O4 Si



CM 7

CRN 818-61-1

CMF C5 H8 O3



CM 8

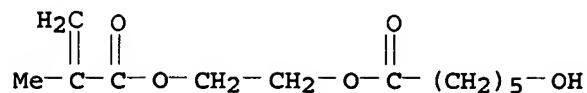
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 9

CRN 85099-10-1

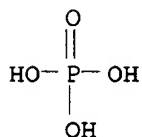
CMF C12 H20 O5



CM 10

CRN 7664-38-2

CMF H3 O4 P



RN 252186-38-2 HCAPLUS

CN 2-Propenoic acid, 2-([1,1'-biphenyl]yloxy)ethyl ester, polymer with
 α-hydro-ω-hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl
 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-
 trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl
 6-hydroxyhexanoate phosphate, Nisseki MM 1000-80, 2-(2-phenoxyethoxy)ethyl
 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane
 (9CI) (CA INDEX NAME)

CM 1

CRN 188793-72-8

CMF Unspecified

CCI PMS, MAN

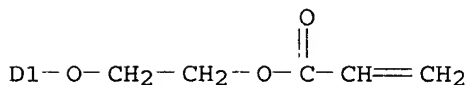
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 146191-39-1

CMF C17 H16 O3

CCI IDS

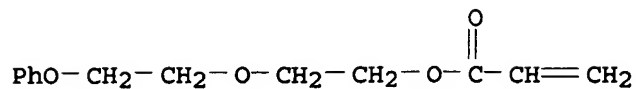


D1- Ph

CM 3

CRN 61630-25-9

CMF C13 H16 O4

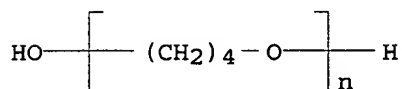


CM 4

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

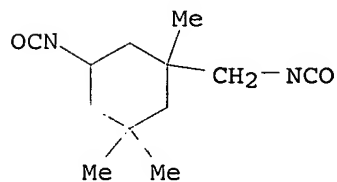
CCI PMS



CM 5

CRN 4098-71-9

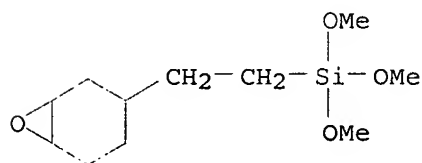
CMF C12 H18 N2 O2



CM 6

CRN 3388-04-3

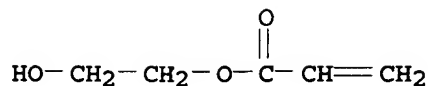
CMF C11 H22 O4 Si



CM 7

CRN 818-61-1

CMF C5 H8 O3



CM 8

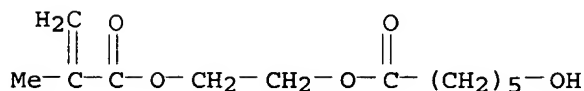
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 9

CRN 85099-10-1

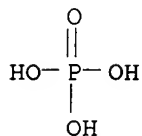
CMF C12 H20 O5



CM 10

CRN 7664-38-2

CMF H3 O4 P



L39 ANSWER 40 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:698274 HCAPLUS

DN 131:323918

TI UV-curable coating compositions for ink-printable base coatings with good scratch resistance and adhesion

IN Koishihara, Tetsuya; Yoshihara, Hideki; Shiota, Atsushi; Niimi, Akinari; Kato, Atsuya

PA Kansai Paint Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 11302563	A2	19991102	JP 1998-110275	19980421
	JP 3273016	B2	20020408		
PRAI	JP 1998-110275		19980421		

AB Title composition comprises (A) 100 parts UV-curable binder, (B) 1-200 parts pigment, (C) 1-15 parts polytetrafluoroethylene wax having average particle diameter $\leq 10 \mu\text{m}$, (D) 1-15 parts polyethylene wax having average

particle diameter 3-10 μm and m.p. $\geq 100^\circ$, and (E) 0.1-10 parts photoinitiator. Thus, 214.3 parts blend contg Aronix M 101-3,4-epoxycyclohexylmethyl acrylate-ethylene glycol-isophthalic acid-neopentyl glycol-phthalic anhydride copolymer 85, pentaerythritol triacrylate 15, Tipaque CR 58 90, Disper BYK 111 1.4 parts and photoinitiator, was mixed with 10 parts SST 1MG (PTFE wax) and 5 parts S 363 (polyethylene wax), applied onto a PET coated tin-free steel plate and UV-cured, showing good appearance, ink-transcription, adhesion and scratch resistance.

IC ICM C09D005-00

ICS C08F002-48; C09D004-00; C09D007-12; C09D167-07; C08F290-06

CC 42-10 (Coatings, Inks, and Related Products)

IT Polyethers, uses

Polyethers, uses

Polyethers, uses

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (epoxy-polyester-; UV-curable coating compns. for ink-printable base coatings with good scratch resistance and adhesion)

IT Polyesters, uses

Polyesters, uses

Polyesters, uses

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (epoxy-polyether-; UV-curable coating compns. for ink-printable base coatings with good scratch resistance and adhesion)

IT Epoxy resins, uses

Epoxy resins, uses

Epoxy resins, uses

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyester-polyether-; UV-curable coating compns. for ink-printable base coatings with good scratch resistance and adhesion)

IT 235775-32-3P 248917-61-5P, Aronix M 101-3,4-

epoxycyclohexylmethyl acrylate-ethylene glycol-isophthalic acid-neopentyl glycol-pentaerythritol triacrylate-phthalic anhydride copolymer

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(UV-curable coating compns. for ink-printable base coatings with good scratch resistance and adhesion)

IT 248917-61-5P, Aronix M 101-3,4-epoxycyclohexylmethyl

acrylate-ethylene glycol-isophthalic acid-neopentyl glycol-pentaerythritol triacrylate-phthalic anhydride copolymer

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(UV-curable coating compns. for ink-printable base coatings with good scratch resistance and adhesion)

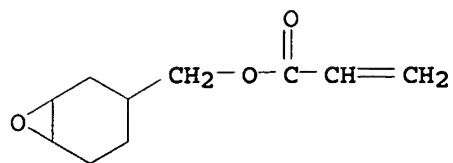
RN 248917-61-5 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, polymer with 2,2-dimethyl-1,3-propanediol, 1,2-ethanediol, 2-(hydroxymethyl)-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 1,3-isobenzofurandione, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate and α -(1-oxo-2-propenyl)- ω -phenoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 64630-63-3

CMF C10 H14 O3

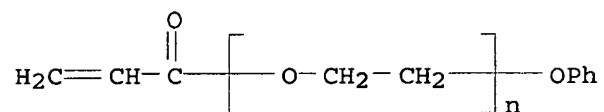


CM 2

CRN 56641-05-5

CMF (C2 H4 O)n C9 H8 O2

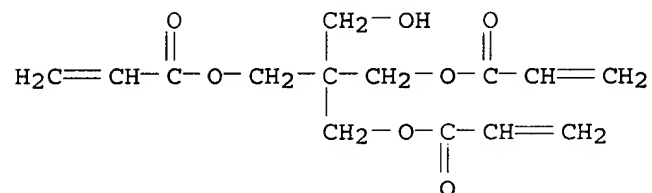
CCI PMS



CM 3

CRN 3524-68-3

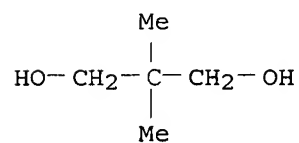
CMF C14 H18 O7



CM 4

CRN 126-30-7

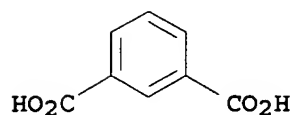
CMF C5 H12 O2



CM 5

CRN 121-91-5

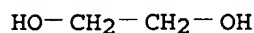
CMF C8 H6 O4



CM 6

CRN 107-21-1

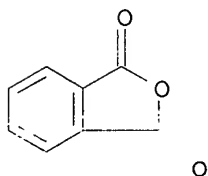
CMF C2 H6 O2



CM 7

CRN 85-44-9

CMF C8 H4 O3



L39 ANSWER 41 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:640936 HCAPLUS

DN 131:272855

TI Thermoplastic resin composition for heat-sensitive adhesive

IN Mizumoto, Kiyoharu; Takahashi, Ikuo; Nakanishi, Kazuhiro; Ohmori, Yasuhiro; Tanabiki, Fumio; Nagasawa, Masakatsu; Inokami, Kiyotaka; Ohshima, Hiroyuki; Miki, Teruhiko; Takemoto, Shin; Kudo, Masataka; Baba, Tsuneo; Idehara, Kenji

PA Daicel Chemical Industries, Ltd., Japan; et al.

SO PCT Int. Appl., 309 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9950356	A1	19991007	WO 1999-JP1613	19990330
	W: US				
	RW: BE, DE, FR, GB, IT				
	JP 11293131	A2	19991026	JP 1998-121869	19980414
	JP 2000086935	A2	20000328	JP 1998-276446	19980910
	JP 2000104031	A2	20000411	JP 1998-274087	19980928
	JP 2000103969	A2	20000411	JP 1998-274088	19980928
	JP 2000104041	A2	20000411	JP 1998-274089	19980928
	JP 2000129234	A2	20000509	JP 1998-303722	19981026
	JP 2000129229	A2	20000509	JP 1998-303723	19981026
	JP 2000127607	A2	20000509	JP 1998-303724	19981026

	JP 2000127608	A2	20000509	JP 1998-303725	19981026
	JP 2000191920	A2	20000711	JP 1998-372831	19981228
	JP 2000191921	A2	20000711	JP 1998-372832	19981228
	JP 2000191922	A2	20000711	JP 1998-372833	19981228
	JP 2000212527	A2	20000802	JP 1999-16289	19990125
	EP 989162	A1	20000329	EP 1999-910761	19990330
	R: BE, DE, FR, GB, IT				
	JP 2000053874	A2	20000222	JP 1999-92678	19990331
	JP 2000008007	A2	20000111	JP 1999-112193	19990420
	JP 2000008008	A2	20000111	JP 1999-112197	19990420
	JP 2000008022	A2	20000111	JP 1999-113701	19990421
PRAI	JP 1998-86649	A	19980331		
	JP 1998-121869	A	19980414		
	JP 1998-109492	A	19980420		
	JP 1998-109495	A	19980420		
	JP 1998-110733	A	19980421		
	JP 1998-276446	A	19980910		
	JP 1998-274087	A	19980928		
	JP 1998-274088	A	19980928		
	JP 1998-274089	A	19980928		
	JP 1998-303722	A	19981026		
	JP 1998-303723	A	19981026		
	JP 1998-303724	A	19981026		
	JP 1998-303725	A	19981026		
	JP 1998-372831	A	19981228		
	JP 1998-372832	A	19981228		
	JP 1998-372833	A	19981228		
	JP 1999-16289	A	19990125		
	WO 1999-JP1613	W	19990330		
OS	MARPAT 131:272855				
AB	<p>A thermoplastic composition, useful for heat-sensitive pressure-sensitive adhesive with excellent blocking resistance, contains ≥ 1 solid plasticizers including (A) esters of ≥ 3 alkyl-substituted cyclohexene ring alc. or crosslinked six-member ring alc. with polybasic acid, and (B) phosphorus compds. having a m.p. 55-100°, and (C) diesters of (alkyl substituted) hydroquinone, resorcinol, or catechol with organic monobasic acid. Thus, bis(cis-3,3,5-trimethylcyclohexyl) phthalate was synthesized from cis-3,3,5-trimethylcyclohexanol and phthalic anhydride, 100 parts of which was mixed with anionic surfactant polyacarboxylic acid ammonium salt 15 and water 80 parts to give a solid plasticizer water dispersion, 100 parts of which was then mixed with 26 parts of 2-ethylhexyl acrylate/MMA/acrylic acid copolymer 28 parts, tackifier terpene resin 17 parts to form a heat-sensitive adhesive, showing adhesion strength 1150 gf/25 mm, block resistance 5 (5 best 1 worst).</p>				
IC	<p>ICM C08L101-00</p> <p>ICS C08L057-06; C08K005-49; C08K005-10; C08K003-36; C09J201-00; C09J007-02; B41M001-30; B41M005-00; C08F246-00; C08F230-08; C08F265-00; C08F291-10</p>				
CC	38-3 (Plastics Fabrication and Uses)				
IT	<p>245652-94-2P, Methyl methacrylate-butyl acrylate-acrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer</p> <p>245652-95-3P, Methyl methacrylate-glycidyl methacrylate-butyl acrylate-acrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer</p> <p>245652-96-4P, Methyl methacrylate-2-methylglycidyl methacrylate-butyl acrylate-acrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer</p> <p>245652-97-5P, Methyl methacrylate-3,4-epoxycyclohexyl methacrylate-butyl acrylate-acrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer</p> <p>245652-98-6P, Methyl methacrylate-3-chloro-2-hydroxypropyl</p>				

methacrylate-butyl acrylate-acrylic acid-styrene-2-ethylhexyl
acrylate-Blemmer PE 200 graft copolymer 245652-99-7P, Methyl
methacrylate-butyl acrylate-acrylic acid-styrene-Blemmer PE 200 graft
copolymer 245653-00-3P, Butyl acrylate-acrylic acid-styrene-2-ethylhexyl
acrylate-Blemmer PE 200 graft copolymer 245653-01-4P, Methyl
methacrylate-acrylic acid-styrene-2-ethylhexyl acrylate-Blemmer PE 200
graft copolymer

RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic
preparation); TEM (Technical or engineered material use); **PREP**
(Preparation); USES (Uses)

(core-shell; thermoplastic resin composition for heat-sensitive adhesive)

IT 85-44-9, Phthalic anhydride 767-54-4, trans-3,3,5-
Trimethylcyclohexanol 933-48-2, cis-3,3,5-Trimethylcyclohexanol
RL: RCT (Reactant); RACT (Reactant or reagent)

(in preparation of plasticizer for thermoplastic heat-sensitive adhesive)

IT 245652-97-5P, Methyl methacrylate-3,4-epoxycyclohexyl
methacrylate-butyl acrylate-acrylic acid-styrene-2-ethylhexyl
acrylate-Blemmer PE 200 graft copolymer
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic
preparation); TEM (Technical or engineered material use); **PREP**
(Preparation); USES (Uses)

(core-shell; thermoplastic resin composition for heat-sensitive adhesive)

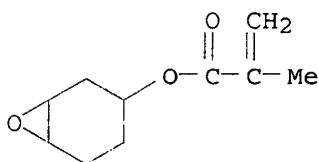
RN 245652-97-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate,
 α -(2-methyl-1-oxo-2-propenyl)- ω -hydroxypoly(oxy-1,2-
ethanediyl), 7-oxabicyclo[4.1.0]hept-3-yl 2-methyl-2-propenoate and
2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 125566-99-6

CMF C10 H14 O3

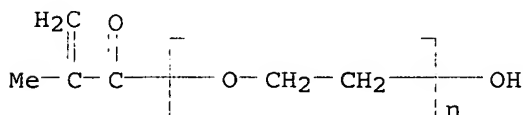


CM 2

CRN 25736-86-1

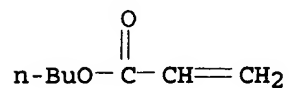
CMF (C2 H4 O)_n C4 H6 O2

CCI PMS



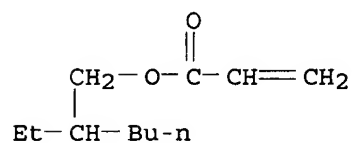
CM 3

CRN 141-32-2
CMF C7 H12 O2



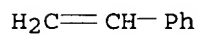
CM 4

CRN 103-11-7
CMF C11 H20 O2



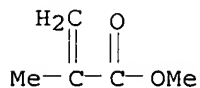
CM 5

CRN 100-42-5
CMF C8 H8



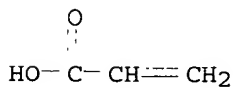
CM 6

CRN 80-62-6
CMF C5 H8 O2



CM 7

CRN 79-10-7
CMF C3 H4 O2



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 42 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:498336 HCAPLUS

DN 131:158353

TI Epoxy resin-based electrically insulating polymeric layer compositions for multilayer printed circuit boards

IN Akimoto, Satoshi; Kawamoto, Kenji; Chino, Masaaki; Watanabe, Takuzo; Kawachi, Shinji

PA Toppan Printing Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11217489	A2	19990810	JP 1998-19783	19980130
PRAI	JP 1998-19783		19980130		

AB The diluted alkali solution-developable, photocurable, and thermosetting elec. insulating compns. comprise (A) UV-curable resins obtained by reaction of (a) reaction products of bisphenol epoxy compds. with unsatd. monocarboxylic acids with (b) (un)saturated polybasic anhydrides, (B) polyfunctional epoxy compds., (C) epoxy compds. having ≥ 2 alicyclic epoxy groups, (D) compds. having both (meth)acrylic and epoxy groups, (E) photopolymn. initiators, (F) fillers, and (G) diluents. Thus, a composition containing (A) 50 parts UV-curable resin obtained from Ripoxy VR

90 (bisphenol A epoxy resin acrylate) and phthalic anhydride, (B) EHPE 3150 (epoxy resin) 12, (C) 5 parts Celloxide 2021 (alicyclic epoxy resin), (D) 14 parts M 100 (3,4-epoxycyclohexylmethyl methacrylate), (F) 15 parts SiO₂ fine powders, and (E) 3.5 parts TPO dissolved in propylene glycol Me ether was applied on a Cu-laminated glass epoxy substrate at 40- μ m thickness, exposed with light via a photomask, developed with an organic amine developer, and heat-set to give a patterned elec. insulating layer, which was Cu-plated to give a printed circuit board with good heat resistance and high peeling strength.

IC ICM C08L063-00

ICS C08F299-02; C08G059-20; H01B003-40; H05K003-46

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 76

IT 235435-18-4P, Celloxide 2021-EHPE 3150-M 100-phthalic anhydride-Ripoxy VR 90 copolymer 235435-19-5P, Celloxide 2081-EHPE 3150-M 100-phthalic anhydride-Ripoxy VR 90 copolymer 235435-20-8P, Celloxide 2083-EHPE 3150-M 100-phthalic anhydride-Ripoxy VR 90 copolymer 237416-65-8P, EHPE 3150-M 100-Epolead GT 401-phthalic anhydride-Ripoxy VR 90 copolymer 237737-75-6P, EHPE 3150-M 100-Epolead GT 301-phthalic anhydride-Ripoxy VR 90 copolymer

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(epoxy resin-based elec. insulating polymeric layer compns. for multilayer printed circuit boards)

IT 235435-18-4P, Celloxide 2021-EHPE 3150-M 100-phthalic anhydride-Ripoxy VR 90 copolymer 235435-19-5P, Celloxide 2081-EHPE 3150-M 100-phthalic anhydride-Ripoxy VR 90 copolymer 235435-20-8P, Celloxide 2083-EHPE 3150-M 100-phthalic anhydride-Ripoxy VR 90 copolymer 237416-65-8P, EHPE 3150-M 100-Epolead GT 401-phthalic anhydride-Ripoxy VR 90 copolymer 237737-75-6P, EHPE 3150-M 100-Epolead GT 301-phthalic anhydride-Ripoxy VR 90 copolymer

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or

engineered material use); **PREP** (Preparation); **USES** (Uses)
 (epoxy resin-based elec. insulating polymeric layer compns. for
 multilayer printed circuit boards)

RN 235435-18-4 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 1,3-isobenzofurandione, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer di-2-propenoate and 7-oxabicyclo[4.1.0]hept-2-ylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 244772-00-7

CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3

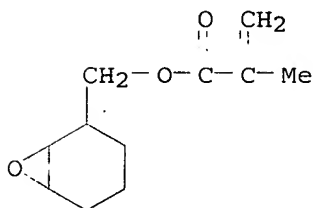
CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 149698-03-3

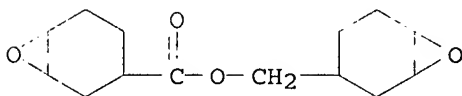
CMF C11 H16 O3



CM 3

CRN 2386-87-0

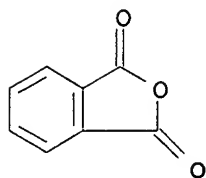
CMF C14 H20 O4



CM 4

CRN 85-44-9

CMF C8 H4 O3



CM 5

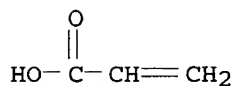
CRN 55127-80-5

CMF (C21 H24 O4)x . 2 C3 H4 O2

CM 6

CRN 79-10-7

CMF C3 H4 O2



CM 7

CRN 25085-99-8

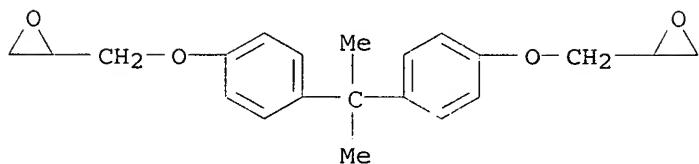
CMF (C21 H24 O4)x

CCI PMS

CM 8

CRN 1675-54-3

CMF C21 H24 O4



RN 235435-19-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-2-ylmethyl ester, polymer with α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 1,3-isobenzofurandione, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer di-2-propenoate and α -(7-oxabicyclo[4.1.0]hept-3-ylmethyl)- ω -[(7-oxabicyclo[4.1.0]hept-3-ylcarbonyl)oxy]poly[oxy(1-oxo-1,6-hexanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 244772-00-7

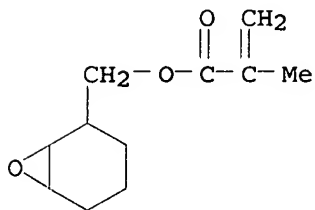
CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3
 CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 149698-03-3

CMF C11 H16 O3

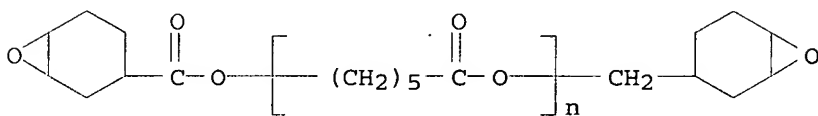


CM 3

CRN 139198-19-9

CMF (C6 H10 O2)n C14 H20 O4

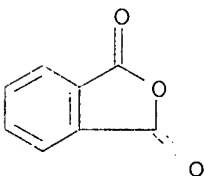
CCI PMS



CM 4

CRN 85-44-9

CMF C8 H4 O3



CM 5

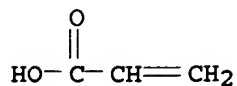
CRN 55127-80-5

CMF (C21 H24 O4)x . 2 C3 H4 O2

CM 6

CRN 79-10-7

CMF C3 H4 O2



CM 7

CRN 25085-99-8

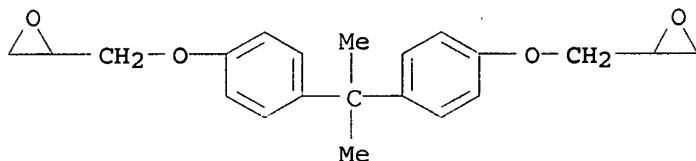
CMF (C21 H24 O4)x

CCI PMS

CM 8

CRN 1675-54-3

CMF C21 H24 O4



RN 235435-20-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-2-ylmethyl ester, polymer with Celloxide 2083, α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 1,3-isobenzofurandione and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 244772-00-7

CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3

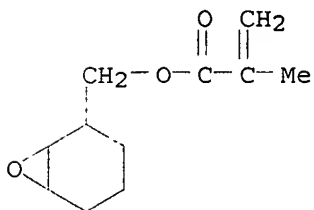
CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 149698-03-3

CMF C11 H16 O3



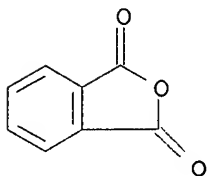
CM 3

CRN 146358-70-5
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 85-44-9
CMF C8 H4 O3

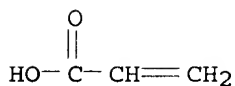


CM 5

CRN 55127-80-5
CMF (C21 H24 O4)x . 2 C3 H4 O2

CM 6

CRN 79-10-7
CMF C3 H4 O2

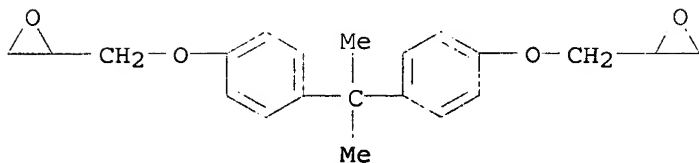


CM 7

CRN 25085-99-8
CMF (C21 H24 O4)x
CCI PMS

CM 8

CRN 1675-54-3
CMF C21 H24 O4



RN 237416-65-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-2-ylmethyl ester, polymer with Epolead GT 401, α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 1,3-isobenzofurandione and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 244772-00-7

CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3

CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 149984-16-7

CMF Unspecified

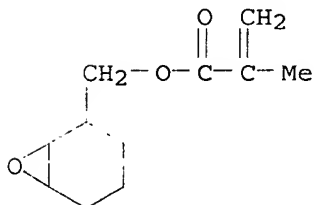
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 149698-03-3

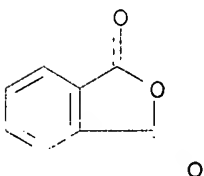
CMF C11 H16 O3



CM 4

CRN 85-44-9

CMF C8 H4 O3



CM 5

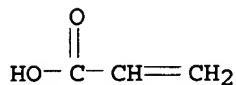
CRN 55127-80-5

CMF (C21 H24 O4)x . 2 C3 H4 O2

CM 6

CRN 79-10-7

CMF C3 H4 O2



CM 7

CRN 25085-99-8

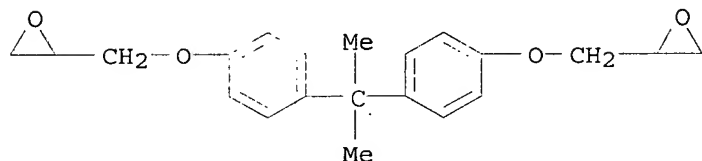
CMF (C21 H24 O4)x

CCI PMS

CM 8

CRN 1675-54-3

CMF C21 H24 O4



RN 237737-75-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-2-ylmethyl ester, polymer with Epolead GT 301, α -hydro- ω -hydroxypoly[oxy(oxiranyl-1,2-cyclohexanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), 1,3-isobenzofurandione and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 244772-00-7

CMF (C8 H12 O2)n (C8 H12 O2)n (C8 H12 O2)n C6 H14 O3

CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 163913-07-3

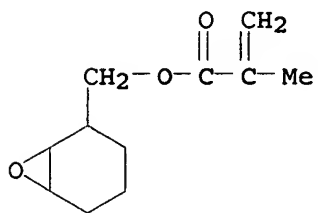
CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

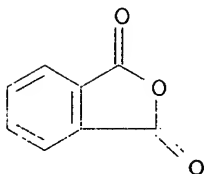
CM 3

CRN 149698-03-3
CMF C11 H16 O3



CM 4

CRN 85-44-9
CMF C8 H4 O3

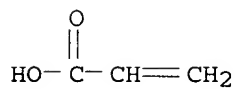


CM 5

CRN 55127-80-5
CMF (C21 H24 O4)x . 2 C3 H4 O2

CM 6

CRN 79-10-7
CMF C3 H4 O2

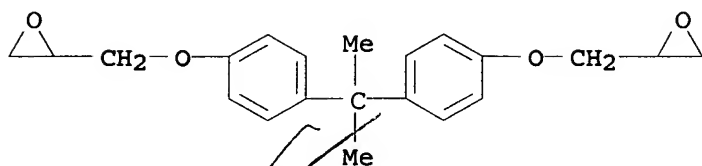


CM 7

CRN 25085-99-8
CMF (C21 H24 O4)x
CCI PMS

CM 8

CRN 1675-54-3
CMF C21 H24 O4



L39 ANSWER 43 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:463408 HCAPLUS

DN 131:130946

TI Acrylate polymer die-attaching pastes for packaging of semiconductor devices

IN Taketa, Toshio; Ando, Katsutoshi

PA Sumitomo Bakelite Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11199758	A2	19990727	JP 1998-2965	19980109
	JP 3389083	B2	20030324		
PRAI	JP 1998-2965		19980109		

AB Title pastes contain (A) reaction products obtained by treating (meth)acrylates containing phosphoric acid groups [CH₂:CRCO₂(CH₂)₂[OCO(CH₂)₅]a]cOPO(OH)b (R = H, Me; a = 0, 1; b, c = 1, 2; b + c = 3), alicyclic epoxy-containing alkoxysilanes, and monoacrylates containing

CH₂:CHCO₂R₁ or CH₂:CMeCO₂R₁ (R₁ = alicyclic and/or aromatic group-containing C_≥10 substituent) in the presence of polymerization initiators at 0-50°, (B) urethane diacrylates obtained from hydroxyalkylacrylic acids, polyalkylene glycols, and diisocyanates, and (C) Ag powders. Thus, a reaction product of AMP 20GY (phenoxydiethylene glycol monoacrylate), A-L 4 (2-phenylphenol-oxirane adduct monoacrylate), Kayamer PM 21 (phosphoric acid-containing methacrylate), and KBM 303 (epoxyalkoxysilane), M 1600 (urethane diacrylate prepared from hydroxyethyl acrylate, polybutylene glycol, and isophorone diisocyanate), and Ag powders were mixed to give a paste with good storage stability and high solder-crack resistance.

IC ICM C08L063-00

ICS C08K003-08; C09J163-00; C08L063-00; C08L075-16

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

IT 230615-99-3P 230616-00-9P 232922-08-6P

232922-10-0P, Aronix M 1600-Kayamer PM 21-KBM 303-

phenoxydiethylene glycol monoacrylate-2-phenylphenol-oxirane adduct monoacrylate copolymer 232939-54-7P 232939-55-8P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylate polymer die-attaching pastes for packaging of semiconductor devices)

IT 230615-99-3P 230616-00-9P 232922-08-6P

232922-10-0P, Aronix M 1600-Kayamer PM 21-KBM 303-

phenoxydiethylene glycol monoacrylate-2-phenylphenol-oxirane adduct monoacrylate copolymer 232939-54-7P 232939-55-8P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylate polymer die-attaching pastes for packaging of semiconductor devices)

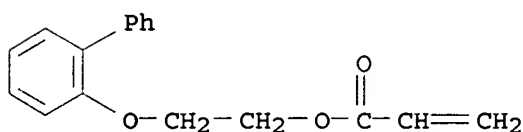
RN 230615-99-3 HCAPLUS

CN 2-Propenoic acid, 2-([1,1'-biphenyl]-2-yloxy)ethyl ester, polymer with α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate phosphate, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 91442-24-9

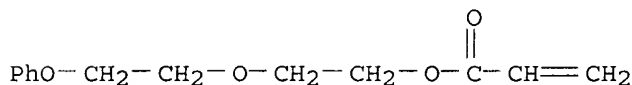
CMF C17 H16 O3



CM 2

CRN 61630-25-9

CMF C13 H16 O4

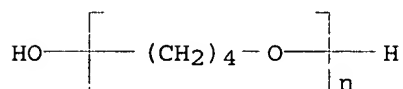


CM 3

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

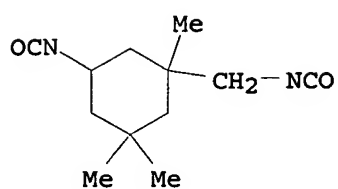
CCI PMS



CM 4

CRN 4098-71-9

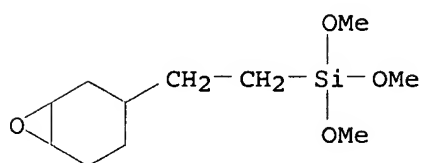
CMF C12 H18 N2 O2



CM 5

CRN 3388-04-3

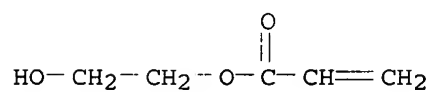
CMF C11 H22 O4 Si



CM 6

CRN 818-61-1

CMF C5 H8 O3



CM 7

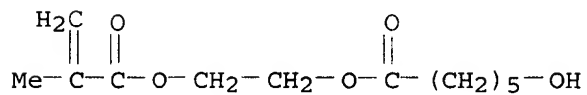
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 8

CRN 85099-10-1

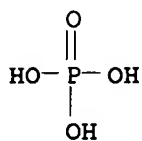
CMF C12 H20 O5



CM 9

CRN 7664-38-2

CMF H3 O4 P



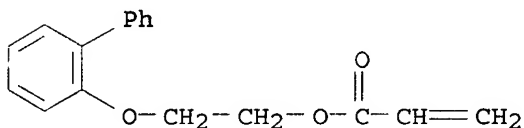
RN 230616-00-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(2-phenoxyethoxy)ethyl ester, polymer with 2-([1,1'-biphenyl]-2-yloxy)ethyl 2-propenoate, α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate phosphate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 91442-24-9

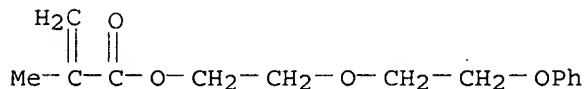
CMF C17 H16 O3



CM 2

CRN 77136-95-9

CMF C14 H18 O4

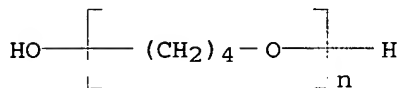


CM 3

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

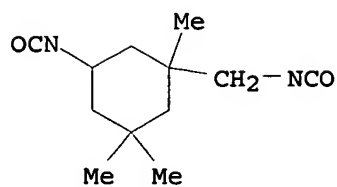
CCI PMS



CM 4

CRN 4098-71-9

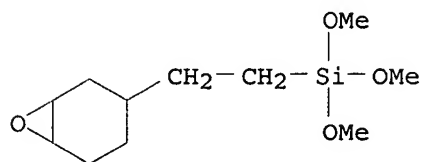
CMF C12 H18 N2 O2



CM 5

CRN 3388-04-3

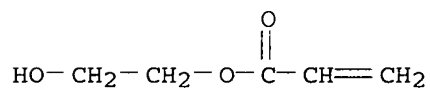
CMF C11 H22 O4 Si



CM 6

CRN 818-61-1

CMF C5 H8 O3



CM 7

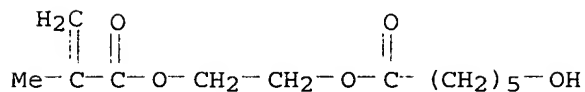
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 8

CRN 85099-10-1

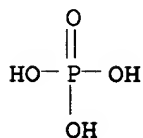
CMF C12 H20 O5



CM 9

CRN 7664-38-2

CMF H3 O4 P



RN 232922-08-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(2-phenoxyethoxy)ethyl ester, polymer with Aronix M 1600, 2-([1,1'-biphenyl]-2-yloxy)ethyl 2-propenoate, α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate phosphate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 100629-45-6

CMF Unspecified

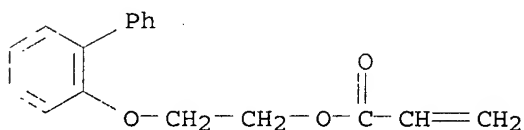
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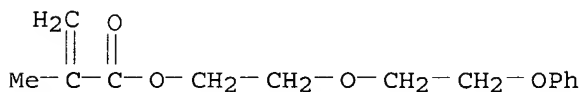
CMF C17 H16 O3



CM 3

CRN 77136-95-9

CMF C14 H18 O4

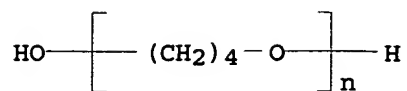


CM 4

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

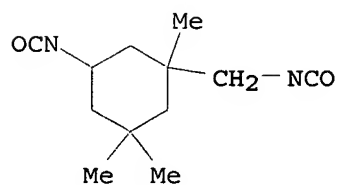
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CM 5

CRN 4098-71-9

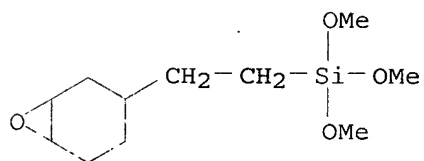
CMF C12 H18 N2 O2



CM 6

CRN 3388-04-3

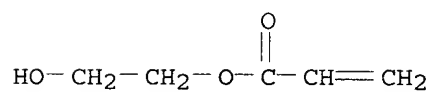
CMF C11 H22 O4 Si



CM 7

CRN 818-61-1

CMF C5 H8 O3



CM 8

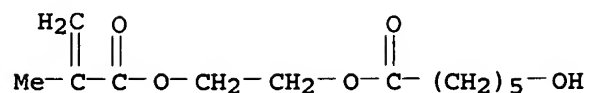
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CMF C12 H20 O5 . x H3 O4 P

CM 9

CRN 85099-10-1

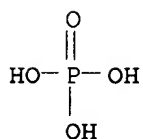
CMF C12 H20 O5



CM 10

CRN 7664-38-2

CMF H3 O4 P



RN 232922-10-0 HCAPLUS

CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-([1,1'-biphenyl]-2-yloxy)ethyl 2-propenoate, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 100629-45-6

CMF Unspecified

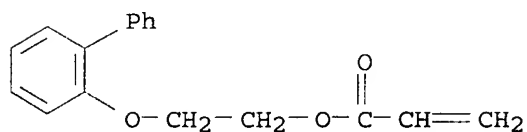
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CM 2

CRN 91442-24-9

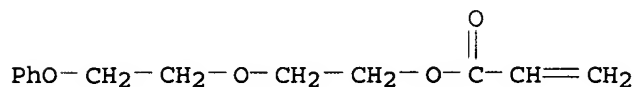
CMF C17 H16 O3



CM 3

CRN 61630-25-9

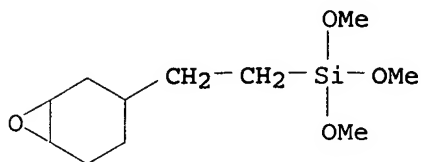
CMF C13 H16 O4



CM 4

CRN 3388-04-3

CMF C11 H22 O4 Si



CM 5

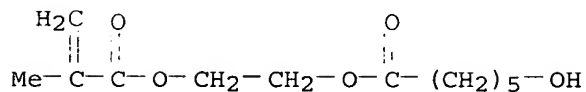
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CMF C12 H20 O5 . x H3 O4 P

CM 6

CRN 85099-10-1

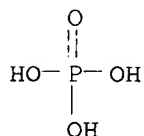
CMF C12 H20 O5



CM 7

CRN 7664-38-2

CMF H3 O4 P



RN 232939-54-7 HCAPLUS

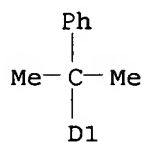
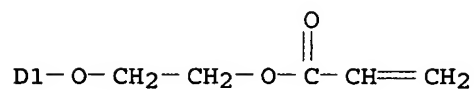
CN 2-Propenoic acid, 2-methyl-, 2-(2-phenoxyethoxy)ethyl ester, polymer with 2-([1,1'-biphenyl]-2-yloxy)ethyl 2-propenoate, α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate phosphate, 2-[(1-methyl-1-phenylethyl)phenoxy]ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 229325-28-4

CMF C20 H22 O3

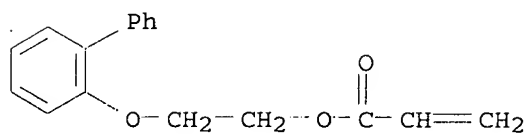
CCI IDS



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CRN 91442-24-9

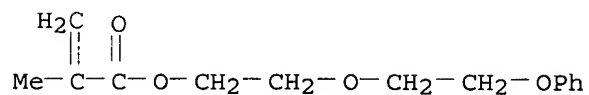
CMF C17 H16 O3



CM 3

CRN 77136-95-9

CMF C14 H18 O4

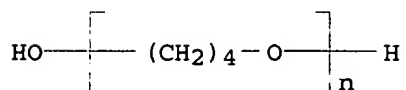


CM 4

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

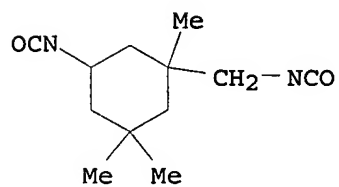
CCI PMS



CM 5

CRN 4098-71-9

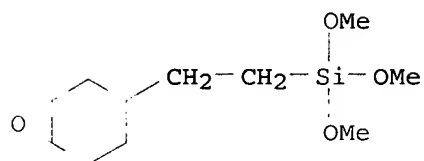
CMF C12 H18 N2 O2



CM 6

CRN 3388-04-3

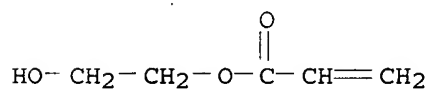
CMF C11 H22 O4 Si



CM 7

CRN 818-61-1

CMF C5 H8 O3



CM 8

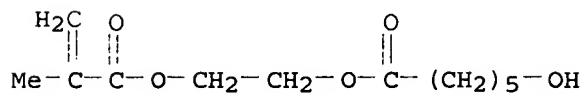
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 9

CRN 85099-10-1

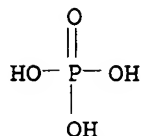
CMF C12 H20 O5



CM 10

CRN 7664-38-2

CMF H3 O4 P



RN 232939-55-8 HCAPLUS

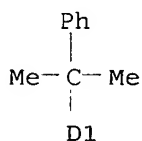
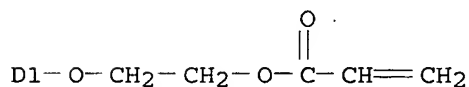
CN 2-Propenoic acid, 2-methyl-, 2-(2-phenoxyethoxy)ethyl ester, polymer with Aronix M 1600, 2-([1,1'-biphenyl]-2-yloxy)ethyl 2-propenoate, α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate phosphate, 2-[(1-methyl-1-phenylethyl)phenoxy]ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 229325-28-4

CMF C20 H22 O3

CCI IDS



CM 2

CRN 100629-45-6

CMF Unspecified

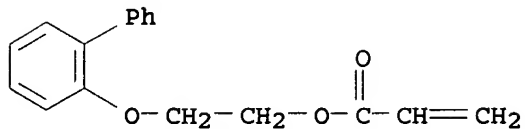
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CM 3

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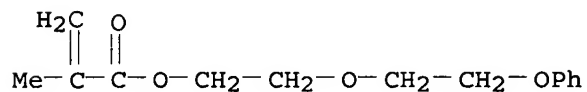
CMF C17 H16 O3



CM 4

CRN 77136-95-9

CMF C14 H18 O4

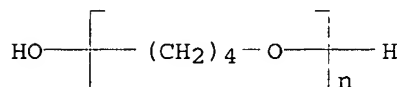


CM 5

CRN 25190-06-1

CMF (C4 H8 O)n H2 O

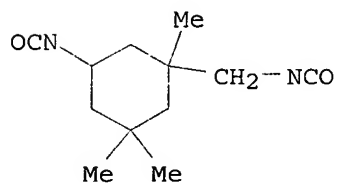
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CM 6

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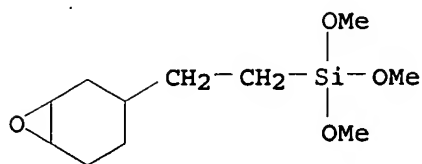
CMF C12 H18 N2 O2



CM 7

CRN 3388-04-3

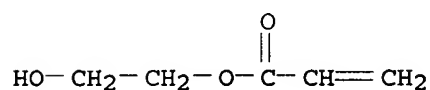
CMF C11 H22 O4 Si



CM 8

CRN 818-61-1

CMF C5 H8 O3



CM 9

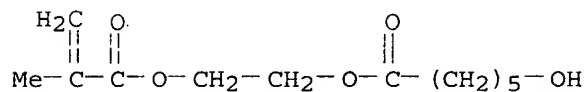
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 10

CRN 85099-10-1

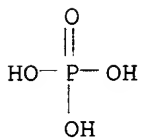
CMF C12 H20 O5



CM 11

CRN 7664-38-2

CMF H3 O4 P



L39 ANSWER 44 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:427346 HCAPLUS

DN 131:117240

TI Die-attaching polyurethane (meth)acrylate resin pastes for semiconductor devices

IN To, Kazuto; Ando, Katsutoshi; Takeda, Toshio

PA Sumitomo Bakelite Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11186297	A2	19990709	JP 1997-351187	19971219
	JP 3209954	B2	20010917		
PRAI	JP 1997-351187		19971219		

AB Title paste with high adhesive strength, low internal stress, good solder cracking resistance, and short curing time comprises (a) compds. obtained by reacting of urethane diacrylate and/or urethane dimethacrylate, with phosphate-containing acrylate and/or phosphate-containing methacrylate described

by a structural formula of $[CH_2:C(R)COO(CH_2)_2(OCO(CH_2)_5)a]cOPO(OH)b$ (R: H or Me; a = 0-1; b, c = 1-2; b + c = 3), and alicyclic epoxy-containing alkoxysilane in the presence of organic preoxide and/or azo-compound polymerization

initiators at 0-50°, (b) monoacrylate described by a structural formula of $CH_2CHCOOR_1$ and monomethacrylate described by a structural formula of $CH_2C(CH_3)COOR_1$ (R_1 : C>10 alicyclic and/or aromatic group-containing groups), and (c) powdered Ag. Thus, a Ag-paste was prepared by reaction of M 1600 (urethane diacrylate) 50 with Kayamer PM 21 (phosphate-containing methacrylate) 1, KBM 303 (alicyclic epoxyalkoxysilane) 0.5, and Percumyl ND (organic preoxide initiator) 1 part, followed by adding of AMP 20GY (phenoxy diethylene glycol monoacrylate) 25, SF 65 (Ag powder) 130, and TCG 1 (Ag powder) 20 into the product 25 parts, showing viscosity 200 PS initially and viscosity increase rate 6% after 1 wk at 25°, adhesion strength 46 kg/6+6 mm for wirebonding of chips on lead frames at room temperature and 13 kg/(6 + 6) mm at 250°, amount of curvature 43 µm, and no delamination at 250° and solder cracking were observed

IC ICM H01L021-52

ICS C09J004-02; C09J011-04; C09J175-14

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

IT 229325-24-0P 229325-26-2P 229325-29-5P
230952-14-4P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

IT 229325-24-0P 229325-26-2P 229325-29-5P
230952-14-4P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

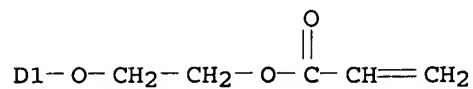
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CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-([1,1'-biphenyl]yloxy)ethyl 2-propenoate, 2-(2-phenoxyethoxy)ethyl 2-methyl-2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

KATHLEEN FULLER EIC1700 REMSEN 4B28 571/272-2505

CRN 146191-39-1
CMF C17 H16 O3
CCI IDS



D1- Ph

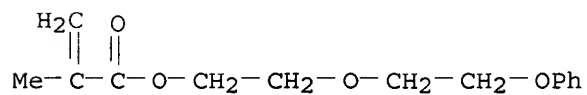
CM 2

CRN 100629-45-6
CMF Unspecified
CCI MAN

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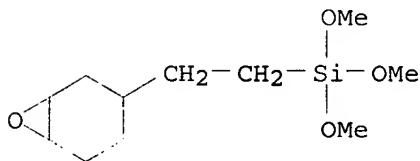
CM 3

CRN 77136-95-9
CMF C14 H18 O4



CM 4

CRN 3388-04-3
CMF C11 H22 O4 Si



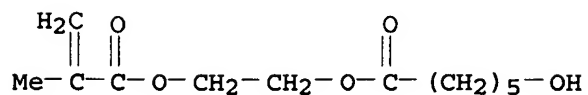
CM 5

CRN 103370-83-8
CMF C12 H20 O5 . x H3 O4 P

CM 6

CRN 85099-10-1

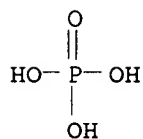
CMF C12 H20 O5



CM 7

CRN 7664-38-2

CMF H3 O4 P



RN 229325-26-2 HCAPLUS

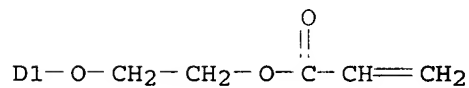
CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-([1,1'-biphenyl]yloxy)ethyl 2-propenoate, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 146191-39-1

CMF C17 H16 O3

CCI IDS



D1- Ph

CM 2

CRN 100629-45-6

CMF Unspecified

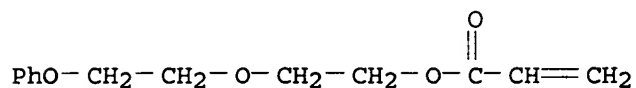
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 61630-25-9

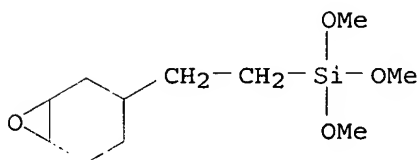
CMF C13 H16 O4



CM 4

CRN 3388-04-3

CMF C11 H22 O4 Si



CM 5

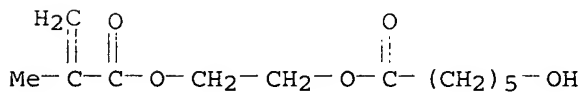
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 6

CRN 85099-10-1

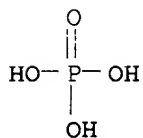
CMF C12 H20 O5



CM 7

CRN 7664-38-2

CMF H3 O4 P



RN 229325-29-5 HCAPLUS

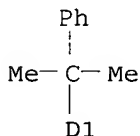
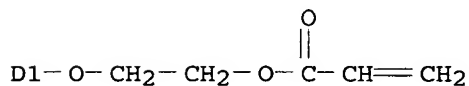
CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-([1,1'-biphenyl]yloxy)ethyl 2-propenoate, 2-[(1-methyl-1-phenylethyl)phenoxy]ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 229325-28-4

CMF C20 H22 O3

CCI IDS

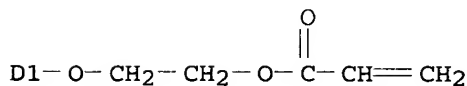


CM 2

CRN 146191-39-1

CMF C17 H16 O3

CCI IDS



D1- Ph

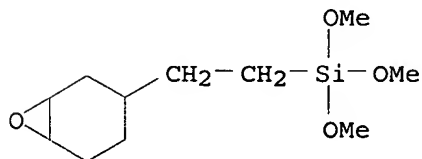
CM 3

CRN 100629-45-6
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 3388-04-3
CMF C11 H22 O4 Si

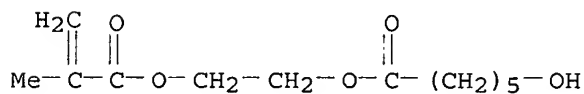


CM 5

CRN 103370-83-8
CMF C12 H20 O5 . x H3 O4 P

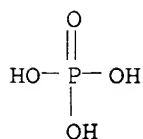
CM 6

CRN 85099-10-1
CMF C12 H20 O5



CM 7

CRN 7664-38-2
CMF H3 O4 P



RN 230952-14-4 HCAPLUS
CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

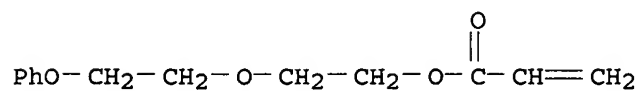
CRN 100629-45-6

CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

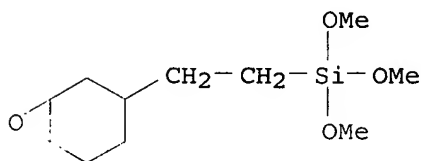
CM 2

CRN 61630-25-9
CMF C13 H16 O4



CM 3

CRN 3388-04-3
CMF C11 H22 O4 Si

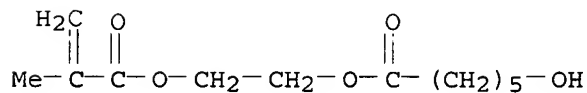


CM 4

CRN 103370-83-8
CMF C12 H20 O5 . x H3 O4 P

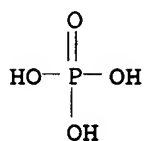
CM 5

CRN 85099-10-1
CMF C12 H20 O5



CM 6

CRN 7664-38-2
CMF H3 O4 P



L39 ANSWER 45 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:407134 HCAPLUS

DN 131:103320

TI Die-attach pastes with good storage stability and adhesion for semiconductor devices

IN To, Kazuto; Ando, Katsutoshi; Takeda, Toshiro

PA Sumitomo Bakelite Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11171944	A2	19990629	JP 1997-346903	19971216
	JP 3313055	B2	20020812		
PRAI	JP 1997-346903		19971216		

AB Title pastes for die-bonding of semiconductor elements and metal frames, contain (A) compds. manufactured by reacting $[\text{CH}_2:\text{CRCO}_2(\text{CH}_2)_2[\text{O}_2\text{C}(\text{CH}_2)_5]\text{a}]_b\text{cOPO}(\text{OH})_b$ (R = H, Me; a = 0-1; b, c = 1-2; b + c = 3), alicyclic epoxy-containing alkoxy silanes, and $\text{CH}_2:\text{CR}_2\text{CO}_2\text{R}_1$ (R1 = alicyclic and/or aromatic group-containing

C \geq 10 substituent; R2 = H, Me) at 0-50°, (B) urethane diacrylates from hydroxyalkylacrylic acids, polyalkylene glycols, and diisocyanates, (C) polymerization initiators, and (D) powdered Ag. Thus, AMP 20GY (phenoxy diethylene glycol monoacrylate) 25, A-L 4 [2-(2-phenylphenoxy)ethyl acrylate] 25, Kayamer PM 21 (P-containing methacrylate) 1, and KBM 303 (alicyclic epoxyalkoxy silane) 0.5 part were mixed to obtain a varnish, 25 parts of which was mixed with M 1600 (urethane diacrylate from hydroxyethyl acrylate, polybutylene glycol, and IPDI) 25, Percumyl ND (organic peroxide initiator) 1.0, SF 65 (Ag powders) 130, and TCG 1 (Ag powders) 20 parts to give a die-attach paste showing viscosity (measured by E-type viscometer) 212 PS initially and viscosity increase 6% after 1 wk at 25°. The paste was used for wire-bonding of chips on Pb frames to show good adhesion 52 kg/(6 + 6 mm) at room temperature and 11 kg/(6 + 6 mm) at 250°.

IC ICM C08F290-06

ICS C08F299-02; C08K003-08; C08L055-00; C09J009-02; C09J175-16; C09J183-07; H01L021-52; C09J004-00

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

IT 230615-99-3P, Hydroxyethyl acrylate, polymer with isophorone diisocyanate, Kayamer PM 21, KBM 303, phenoxy diethylene glycol acrylate, 2-(2-phenylphenoxy)ethyl acrylate, and polybutylene glycol 230616-00-9P, Hydroxyethyl acrylate, polymer with isophorone diisocyanate, Kayamer PM 21, KBM 303, phenoxy diethylene glycol methacrylate, 2-(2-phenylphenoxy)ethyl acrylate, and polybutylene glycol 230639-14-2P, Cumylphenoxyethyl acrylate, polymer with hydroxyethyl acrylate, isophorone diisocyanate, Kayamer PM 21, KBM 303, polybutylene glycol, and tridecyl acrylate 230639-15-3P,

Cumylphenoxyethyl acrylate, polymer with hydroxyethyl acrylate, isophorone diisocyanate, Kayamer PM 21, KBM 303, phenoxy diethylene glycol acrylate, 2-(2-phenylphenoxy)ethyl acrylate, polybutylene glycol, and tridecyl acrylate

RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)

(storage-stable die-attach pastes containing phosphate group-containing urethane acrylates for semiconductor devices)

IT 230615-99-3P, Hydroxyethyl acrylate, polymer with isophorone diisocyanate, Kayamer PM 21, KBM 303, phenoxy diethylene glycol acrylate, 2-(2-phenylphenoxy)ethyl acrylate, and polybutylene glycol
230616-00-9P, Hydroxyethyl acrylate, polymer with isophorone diisocyanate, Kayamer PM 21, KBM 303, phenoxy diethylene glycol methacrylate, 2-(2-phenylphenoxy)ethyl acrylate, and polybutylene glycol
230639-14-2P, Cumylphenoxyethyl acrylate, polymer with hydroxyethyl acrylate, isophorone diisocyanate, Kayamer PM 21, KBM 303, polybutylene glycol, and tridecyl acrylate 230639-15-3P, Cumylphenoxyethyl acrylate, polymer with hydroxyethyl acrylate, isophorone diisocyanate, Kayamer PM 21, KBM 303, phenoxy diethylene glycol acrylate, 2-(2-phenylphenoxy)ethyl acrylate, polybutylene glycol, and tridecyl acrylate

RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)

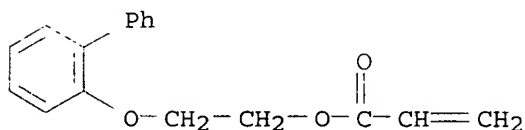
(storage-stable die-attach pastes containing phosphate group-containing urethane acrylates for semiconductor devices)

RN 230615-99-3 HCAPLUS
CN 2-Propenoic acid, 2-([1,1'-biphenyl]-2-yloxy)ethyl ester, polymer with α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate phosphate, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 91442-24-9

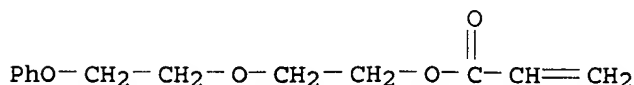
CMF C17 H16 O3



CM 2

CRN 61630-25-9

CMF C13 H16 O4

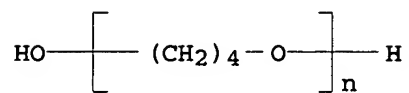


CM 3

CRN 25190-06-1

CMF (C4 H8 O)n H2 O

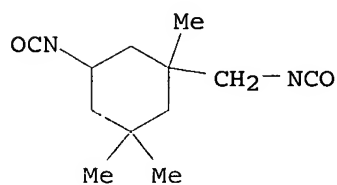
CCI PMS



CM 4

CRN 4098-71-9

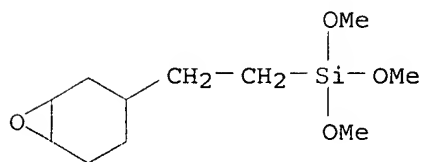
CMF C12 H18 N2 O2



CM 5

CRN 3388-04-3

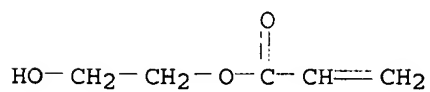
CMF C11 H22 O4 Si



CM 6

CRN 818-61-1

CMF C5 H8 O3



CM 7

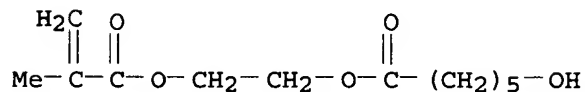
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 8

CRN 85099-10-1

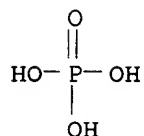
CMF C12 H20 O5



CM 9

CRN 7664-38-2

CMF H3 O4 P



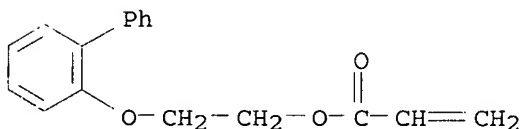
RN 230616-00-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(2-phenoxyethoxy)ethyl ester, polymer with 2-([1,1'-biphenyl]-2-yloxy)ethyl 2-propenoate, α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate phosphate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 91442-24-9

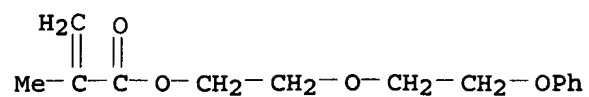
CMF C17 H16 O3



CM 2

CRN 77136-95-9

CMF C14 H18 O4

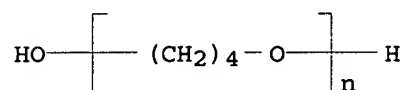


CM 3

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

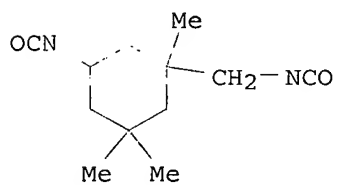
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CM 4

CRN 4098-71-9

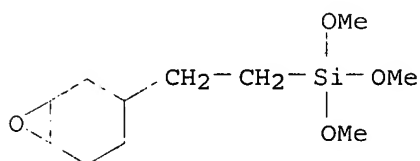
CMF C12 H18 N2 O2



CM 5

CRN 3388-04-3

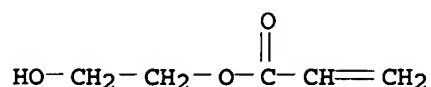
CMF C11 H22 O4 Si



CM 6

CRN 818-61-1

CMF C5 H8 O3



CM 7

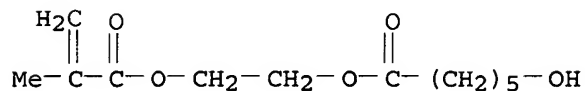
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 8

CRN 85099-10-1

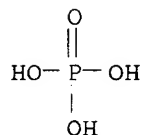
CMF C12 H20 O5



CM 9

CRN 7664-38-2

CMF H3 O4 P



RN 230639-14-2 HCAPLUS

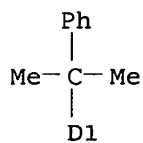
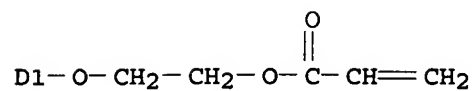
CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl); 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate phosphate, 2-[(1-methyl-1-phenylethyl)phenoxy]ethyl 2-propenoate, tridecyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 229325-28-4

CMF C20 H22 O3

CCI IDS

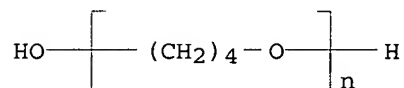


CM 2

CRN 25190-06-1

CMF (C4 H8 O)n H2 O

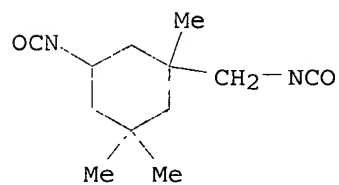
CCI PMS



CM 3

CRN 4098-71-9

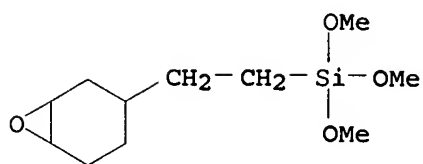
CMF C12 H18 N2 O2



CM 4

CRN 3388-04-3

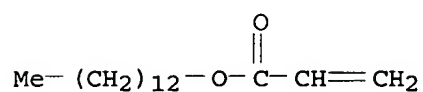
CMF C11 H22 O4 Si



CM 5

CRN 3076-04-8

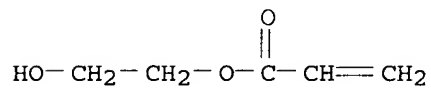
CMF C16 H30 O2



CM 6

CRN 818-61-1

CMF C5 H8 O3



CM 7

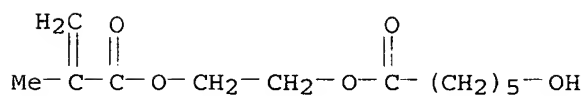
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 8

CRN 85099-10-1

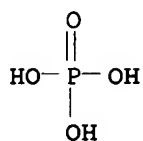
CMF C12 H20 O5



CM 9

CRN 7664-38-2

CMF H3 O4 P



RN 230639-15-3 HCAPLUS

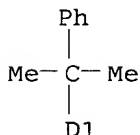
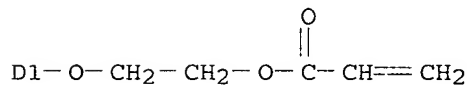
CN 2-Propenoic acid, 2-([1,1'-biphenyl]-2-yloxy)ethyl ester, polymer with
 α -hydroxy- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl
 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-
 trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl
 6-hydroxyhexanoate phosphate, 2-[(1-methyl-1-phenylethyl)phenoxy]ethyl
 2-propenoate, 2-(2-phenoxyethoxy)ethyl 2-propenoate, tridecyl 2-propenoate
 and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA
 INDEX NAME)

CM 1

CRN 229325-28-4

CMF C20 H22 O3

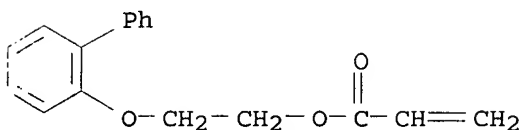
CCI IDS



CM 2

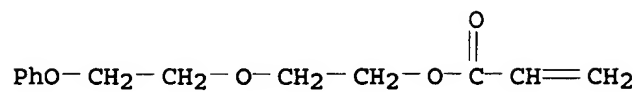
CRN 91442-24-9

CMF C17 H16 O3



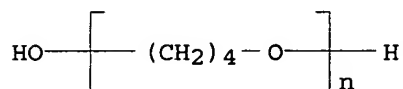
CM 3

CRN 61630-25-9
CMF C13 H16 O4



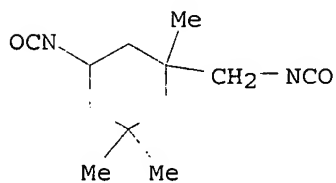
CM 4

CRN 25190-06-1
CMF (C4 H8 O)_n H2 O
CCI PMS



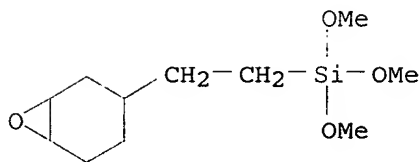
CM 5

CRN 4098-71-9
CMF C12 H18 N2 O2



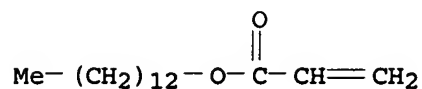
CM 6

CRN 3388-04-3
CMF C11 H22 O4 Si



CM 7

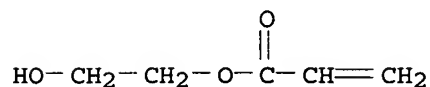
CRN 3076-04-8
CMF C16 H30 O2



CM 8

CRN 818-61-1

CMF C5 H8 O3



CM 9

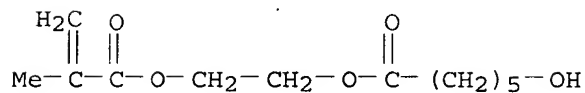
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 10

CRN 85099-10-1

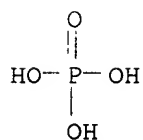
CMF C12 H20 O5



CM 11

CRN 7664-38-2

CMF H3 O4 P



L39 ANSWER 46 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:407133 HCAPLUS

DN 131:103319

TI Die-attach pastes for semiconductors with short curing time and excellent solder crack resistance

IN Taketa, Toshio; Ando, Katsutoshi

PA Sumitomo Bakelite Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11171943	A2	19990629	JP 1997-346902	19971216
	JP 3313054	B2	20020812		
PRAI	JP 1997-346902		19971216		

AB The pastes comprise (A) compns. prepared by reaction of polyurethane di(meth)acrylates, $[\text{CH}_2:\text{CRCO}_2(\text{CH}_2)_2[\text{OCO}(\text{CH}_2)_5\text{a}]\text{cOPO}(\text{OH})\text{b}$ (R = H, Me; a = 0, 1; b = 1, 2; c = 1, 2; b + c = 3), and alicyclic epoxy-containing alkoxysilanes at 0-50°, (B) $\text{CH}_2:\text{CHCO}_2\text{R}_1$ or $\text{CH}_2:\text{CMeCO}_2\text{R}_1$ (R₁ = alicyclic and/or aromatic group having ≥ 10 C), (C) polymerization initiators, and (D) Ag powders. Thus, 25 parts varnish, prepared by reaction at 25° for 24 h of polyurethane diacrylate (M 1600) 50, P-containing methacrylate (Kayamer PM 21) 1, and alicyclic epoxyalkoxysilane (KBM 303) 0.5 part, was mixed with phenoxy diethylene glycol acrylate (AMP 20GY) 25, a polymerization initiator (Percumyl ND) 1, and powdered Ag (SF 65, TCG 1) 150 parts

to give a paste showing little viscosity increase in 1 wk at 25°, no peeling after wire-bonding, and good solder resistance.

IC ICM C08F290-06
ICS C08K003-08; C08L055-00; C09J009-02; C09J175-16; H1L 215-2 ;
C09J004-02

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

IT 229325-24-0P, Kayamer PM 21-KBM 303-M 1600-phenoxydiethylene glycol methacrylate-phenylphenoxyethylene glycol acrylate copolymer 229325-26-2P, Kayamer PM 21-KBM 303-M 1600-phenoxydiethylene glycol monoacrylate-phenylphenoxyethylene glycol acrylate copolymer 230952-14-4P, Kayamer PM 21-KBM 303-M 1600-phenoxydiethylene glycol monoacrylate copolymer 230952-15-5P, Kayamer PM 21-KBM 303-M 1600-2-[(1-methyl-1-phenylethyl)phenoxy]ethyl acrylate-phenoxydiethylene glycol monoacrylate copolymer 230952-16-6P, Hydroxyethyl acrylate-isophorone diisocyanate-Kayamer PM 21-KBM 303-phenoxydiethylene glycol monoacrylate-polybutylene glycol copolymer 230952-17-7P, Hydroxyethyl acrylate-isophorone diisocyanate-Kayamer PM 21-KBM 303-phenoxydiethylene glycol methacrylate-phenylphenoxyethylene glycol acrylate-polybutylene glycol copolymer 230952-18-8P, Hydroxyethyl acrylate-isophorone diisocyanate-Kayamer PM 21-KBM 303-phenoxydiethylene glycol monoacrylate-phenylphenoxyethylene glycol acrylate-polybutylene glycol copolymer 230952-19-9P, Hydroxyethyl acrylate-isophorone diisocyanate-Kayamer PM 21-KBM 303-2-[(1-methyl-1-phenylethyl)phenoxy]ethyl acrylate-phenoxydiethylene glycol monoacrylate-polybutylene glycol copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polyurethane acrylate-based die-attach pastes for semiconductors with short curing time and good solder crack resistance)

IT 229325-24-0P, Kayamer PM 21-KBM 303-M 1600-phenoxydiethylene glycol methacrylate-phenylphenoxyethylene glycol acrylate copolymer 229325-26-2P, Kayamer PM 21-KBM 303-M 1600-phenoxydiethylene glycol monoacrylate-phenylphenoxyethylene glycol acrylate copolymer 230952-14-4P, Kayamer PM 21-KBM 303-M 1600-phenoxydiethylene glycol monoacrylate copolymer 230952-15-5P, Kayamer PM 21-KBM 303-M 1600-2-[(1-methyl-1-phenylethyl)phenoxy]ethyl acrylate-phenoxydiethylene glycol monoacrylate copolymer 230952-16-6P, Hydroxyethyl acrylate-isophorone diisocyanate-Kayamer PM 21-KBM 303-phenoxydiethylene glycol monoacrylate-polybutylene glycol copolymer

230952-17-7P, Hydroxyethyl acrylate-isophorone diisocyanate-Kayamer PM 21-KBM 303-phenoxydiethylene glycol methacrylate-phenylphenoxyethylene glycol acrylate-polybutylene glycol copolymer **230952-18-8P**, Hydroxyethyl acrylate-isophorone diisocyanate-Kayamer PM 21-KBM 303-phenoxydiethylene glycol monoacrylate-phenylphenoxyethylene glycol acrylate-polybutylene glycol copolymer **230952-19-9P**, Hydroxyethyl acrylate-isophorone diisocyanate-Kayamer PM 21-KBM 303-2-[(1-methyl-1-phenylethyl)phenoxy]ethyl acrylate-phenoxydiethylene glycol monoacrylate-polybutylene glycol copolymer

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)

(polyurethane acrylate-based die-attach pastes for semiconductors with short curing time and good solder crack resistance)

RN 229325-24-0 HCAPLUS

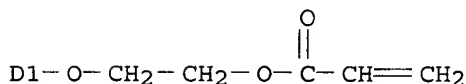
CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-([1,1'-biphenyl]yloxy)ethyl 2-propenoate, 2-(2-phenoxyethoxy)ethyl 2-methyl-2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 146191-39-1

CMF C17 H16 O3

CCI IDS



D1- Ph

CM 2

CRN 100629-45-6

CMF Unspecified

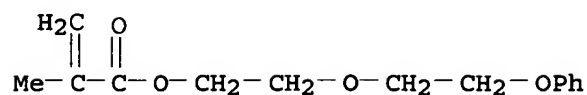
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 77136-95-9

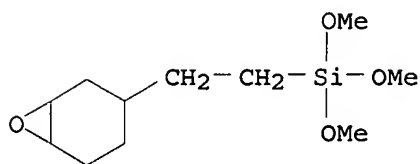
CMF C14 H18 O4



CM 4

CRN 3388-04-3

CMF C11 H22 O4 Si



CM 5

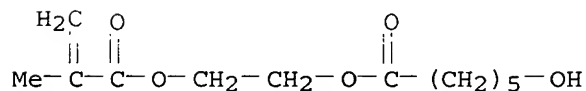
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 6

CRN 85099-10-1

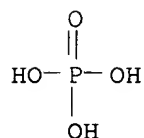
CMF C12 H20 O5



CM 7

CRN 7664-38-2

CMF H3 O4 P

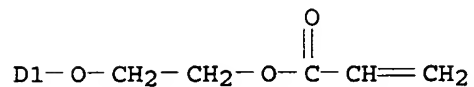


RN 229325-26-2 HCAPLUS

CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-([1,1'-biphenyl]yloxy)ethyl 2-propenoate, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 146191-39-1
CMF C17 H16 O3
CCI IDS



D1- Ph

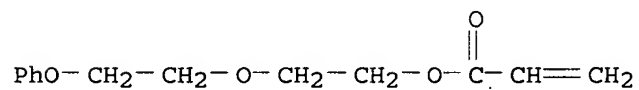
CM 2

CRN 100629-45-6
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

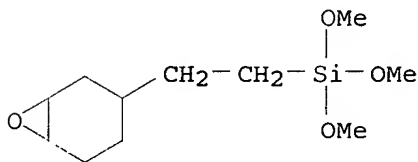
CM 3

CRN 61630-25-9
CMF C13 H16 O4



CM 4

CRN 3388-04-3
CMF C11 H22 O4 Si



CM 5

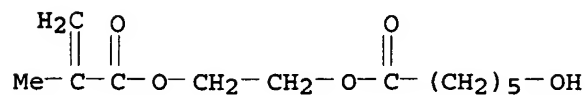
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 6

CRN 85099-10-1

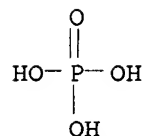
CMF C12 H20 O5



CM 7

CRN 7664-38-2

CMF H3 O4 P



RN 230952-14-4 HCAPLUS

CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 100629-45-6

CMF Unspecified

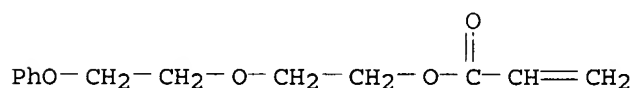
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 61630-25-9

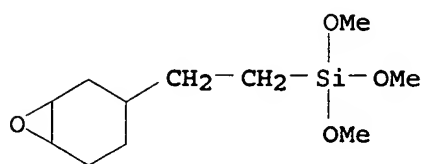
CMF C13 H16 O4



CM 3

CRN 3388-04-3

CMF C11 H22 O4 Si



CM 4

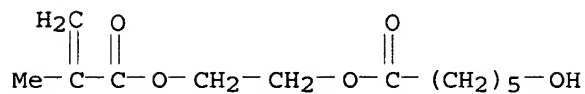
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 5

CRN 85099-10-1

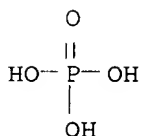
CMF C12 H20 O5



CM 6

CRN 7664-38-2

CMF H3 O4 P



RN 230952-15-5 HCAPLUS

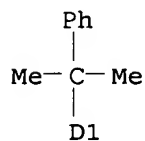
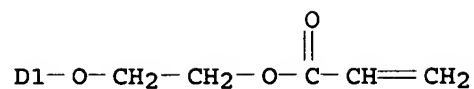
CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, phosphate, polymer with Aronix M 1600, 2-[(1-methyl-1-phenylethyl)phenoxy]ethyl 2-propenoate, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 229325-28-4

CMF C20 H22 O3

CCI IDS



CM 2

CRN 100629-45-6

CMF Unspecified

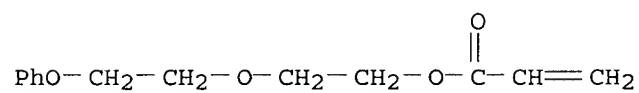
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 61630-25-9

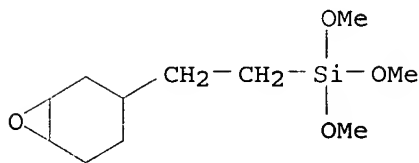
CMF C13 H16 O4



CM 4

CRN 3388-04-3

CMF C11 H22 O4 Si



CM 5

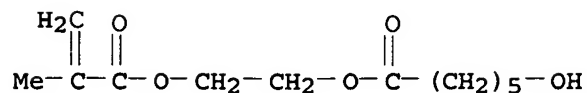
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 6

CRN 85099-10-1

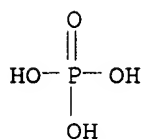
CMF C12 H20 O5



CM 7

CRN 7664-38-2

CMF H3 O4 P



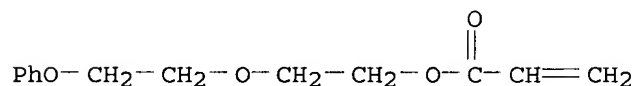
RN 230952-16-6 HCAPLUS

CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate phosphate, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 61630-25-9

CMF C13 H16 O4

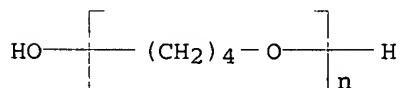


CM 2

CRN 25190-06-1

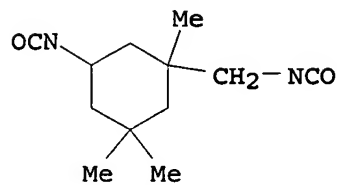
CMF (C4 H8 O)_n H2 O

CCI PMS



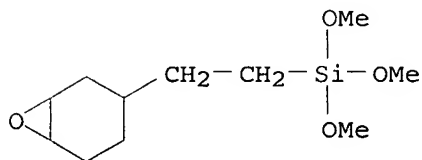
CM 3

CRN 4098-71-9
CMF C12 H18 N2 O2



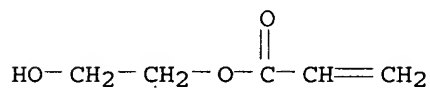
CM 4

CRN 3388-04-3
CMF C11 H22 O4 Si



CM 5

CRN 818-61-1
CMF C5 H8 O3

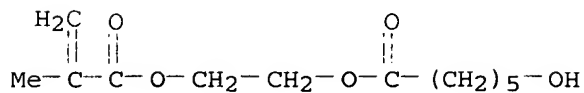


CM 6

CRN 103370-83-8
CMF C12 H20 O5 . x H3 O4 P

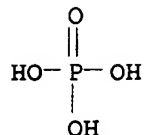
CM 7

CRN 85099-10-1
CMF C12 H20 O5



CM 8

CRN 7664-38-2
CMF H3 O4 P

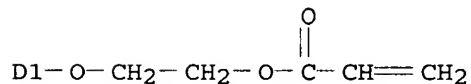


RN 230952-17-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(2-phenoxyethoxy)ethyl ester, polymer with 2-([1,1'-biphenyl]yloxy)ethyl 2-propenoate, α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate phosphate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

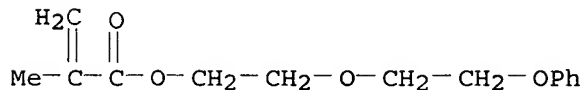
CRN 146191-39-1
CMF C17 H16 O3
CCI IDS



D1- Ph

CM 2

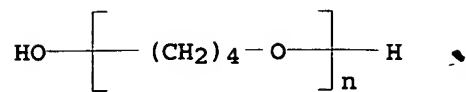
CRN 77136-95-9
CMF C14 H18 O4



CM 3

CRN 25190-06-1
CMF (C4 H8 O)_n H2 O

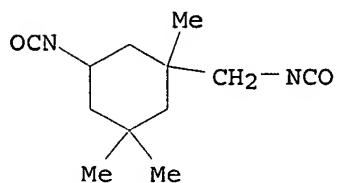
CCI PMS



CM 4

CRN 4098-71-9

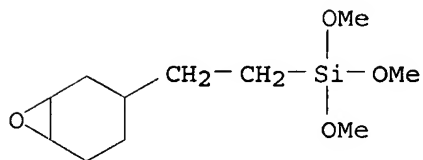
CMF C12 H18 N2 O2



CM 5

CRN 3388-04-3

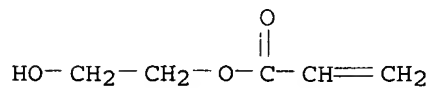
CMF C11 H22 O4 Si



CM 6

CRN 818-61-1

CMF C5 H8 O3



CM 7

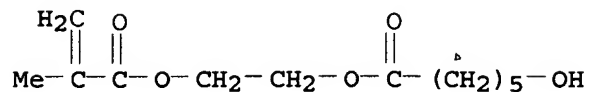
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 8

CRN 85099-10-1

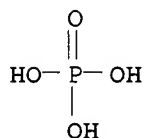
CMF C12 H20 O5



CM 9

CRN 7664-38-2

CMF H3 O4 P



RN 230952-18-8 HCAPLUS

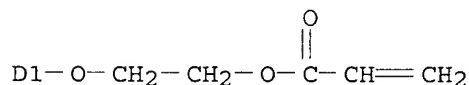
CN 2-Propenoic acid, 2-([1,1'-biphenyl]yloxy)ethyl ester, polymer with α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate phosphate, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 146191-39-1

CMF C17 H16 O3

CCI IDS

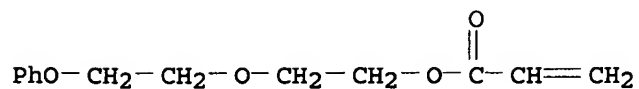


D1- Ph

CM 2

CRN 61630-25-9

CMF C13 H16 O4

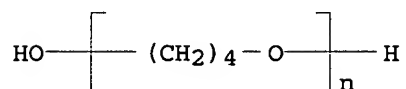


CM 3

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

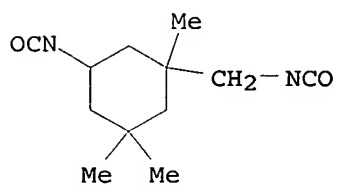
CCI PMS



CM 4

CRN 4098-71-9

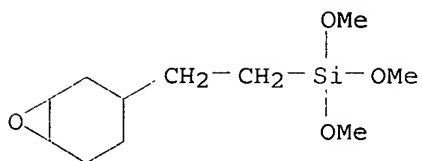
CMF C12 H18 N2 O2



CM 5

CRN 3388-04-3

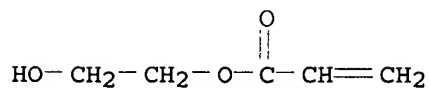
CMF C11 H22 O4 Si



CM 6

CRN 818-61-1

CMF C5 H8 O3



CM 7

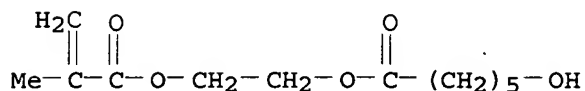
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 8

CRN 85099-10-1

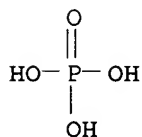
CMF C12 H20 O5



CM 9

CRN 7664-38-2

CMF H3 O4 P



RN 230952-19-9 HCAPLUS

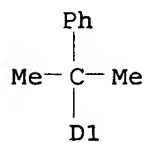
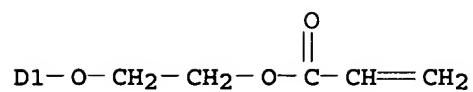
CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with α -hydro- ω -hydroxypoly(oxy-1,4-butanediyl), 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 6-hydroxyhexanoate phosphate, 2-[(1-methyl-1-phenylethyl)phenoxy]ethyl 2-propenoate, 2-(2-phenoxyethoxy)ethyl 2-propenoate and trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 229325-28-4

CMF C20 H22 O3

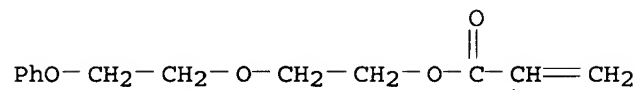
CCI IDS



CM 2

CRN 61630-25-9

CMF C13 H16 O4

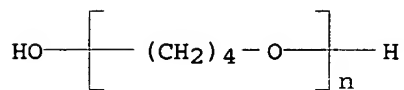


CM 3

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

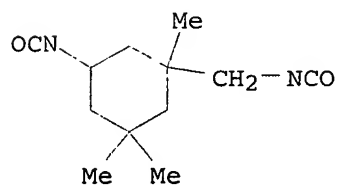
CCI PMS



CM 4

CRN 4098-71-9

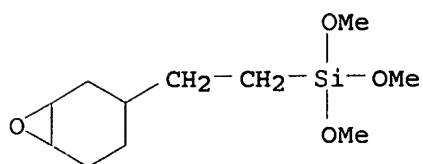
CMF C12 H18 N2 O2



CM 5

CRN 3388-04-3

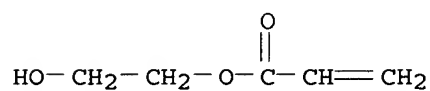
CMF C11 H22 O4 Si



CM 6

CRN 818-61-1

CMF C5 H8 O3



CM 7

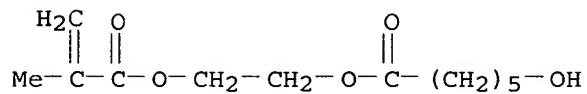
CRN 103370-83-8

CMF C12 H20 O5 . x H3 O4 P

CM 8

CRN 85099-10-1

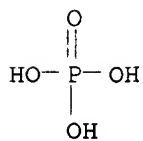
CMF C12 H20 O5



CM 9

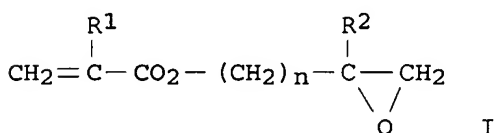
CRN 7664-38-2

CMF H3 O4 P



L39 ANSWER 47 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1998:314771 HCAPLUS
 DN 129:29158
 TI Acrylic epoxy resin compositions for protection films on color filters
 IN Konno, Hidetoshi; Seike, Naoyuki; Ishikawa, Hidenobu
 PA Dainippon Ink and Chemicals, Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10130368	A2	19980519	JP 1996-283843	19961025
	JP 3369414	B2	20030120		
PRAI	JP 1996-283843		19961025		
GI					



AB The compns. contain (A) polymers with single polymerizable unsatd. double bonds and ≥1 alicyclic epoxy group, (B) ≥1 polyvalent carboxylic acids or their **anhydrides**, and optionally (C) coupling agents. Preferably, A may contain epoxy vinyl esters I (R¹ = H, lower alkyl; R² = lower alkyl; n = 105). Thus, 30.0 parts 3,4-epoxycyclohexyl methacrylate homopolymer solution with nonvolatile content 49.5%, Gardner viscosity L-M, and number-average mol. weight 4800 was mixed

with 29.4 parts propylene glycol monomethyl ether acetate and (γ-glycidioxypropyl)trimethoxysilane, further mixed with 8.4 parts trimellitic **anhydride** dimethylglycol solution, and filtered to give a storage-stable coating, which was spin-coated onto a glass plate, dried, and cured at 230° to give a 3.1-μm thick smooth coat showing light transmittance (350-800 nm) ≥95%. After sputtering the film with ITO target, no whitening nor crack was observed. The coat also showed excellent resistance to soaking in boiling water, NaOH solution, and NMP.

IC ICM C08G059-20
 ICS C08G059-42; C08K005-54; C08L063-00
 CC 42-9 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 37, 74

ST acrylic epoxy resin coating color filter; transparent coating acrylic epoxy resin; heat resistant coating acrylic epoxy resin; solvent resistant coating acrylic epoxy resin; optical filter coating acrylic epoxy resin; epoxycyclohexyl methacrylate polymer coating color filter; acid **anhydride** hardener acrylic epoxy coating; trimellitic **anhydride** hardener acrylic epoxy coating; water resistant coating acrylic epoxy resin

IT 140197-48-4P 207850-23-5P 207850-24-6P
 207850-25-7P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic epoxy resin compns. for protection films on color filters)

IT 207850-26-8P, 3,4-Epoxy cyclohexyl methacrylate-trimellitic
anhydride copolymer 207850-27-9P 207850-28-0P
 207850-29-1P
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
 engineered material use); **PREP (Preparation)**; USES (Uses)
 (acrylic epoxy resin compns. for protection films on color filters)

IT 552-30-7, Trimellitic **anhydride**
 RL: MOA (Modifier or additive use); USES (Uses)
 (crosslinking agent; acrylic epoxy resin compns. for protection films
 on color filters)

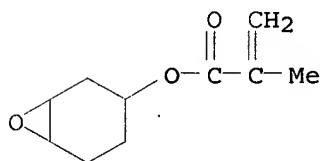
IT 140197-48-4P 207850-23-5P 207850-24-6P
 207850-25-7P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
 (Properties); TEM (Technical or engineered material use); **PREP**
 (**Preparation**); USES (Uses)
 (acrylic epoxy resin compns. for protection films on color filters)

RN 140197-48-4 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-yl ester,
 homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 125566-99-6

CMF C10 H14 O3

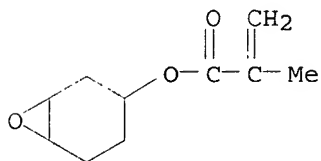


RN 207850-23-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, (2-methyloxiranyl)methyl ester, polymer with
 7-oxabicyclo[4.1.0]hept-3-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125566-99-6

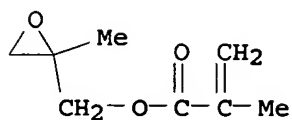
CMF C10 H14 O3



CM 2

CRN 41768-20-1

CMF C8 H12 O3



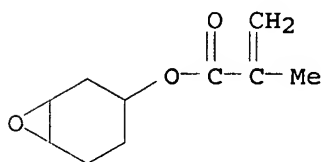
RN 207850-24-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (2-methyloxiranyl)methyl ester, polymer with octadecyl 2-methyl-2-propenoate and 7-oxabicyclo[4.1.0]hept-3-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125566-99-6

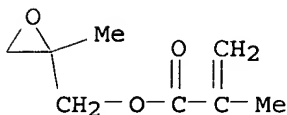
CMF C10 H14 O3



CM 2

CRN 41768-20-1

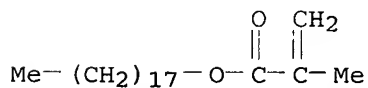
CMF C8 H12 O3



CM 3

CRN 32360-05-7

CMF C22 H42 O2



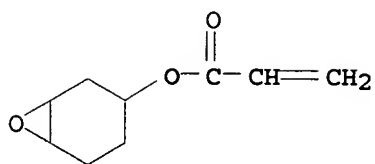
RN 207850-25-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (2-methyloxiranyl)methyl ester, polymer with 7-oxabicyclo[4.1.0]hept-3-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 131826-14-7

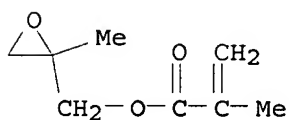
CMF C9 H12 O3



CM 2

CRN 41768-20-1

CMF C8 H12 O3



IT 207850-27-9P 207850-28-0P 207850-29-1P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic epoxy resin compns. for protection films on color filters)

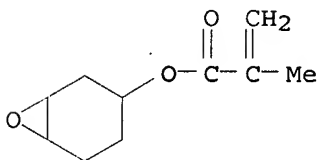
RN 207850-27-9 HCAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, polymer with (2-methyloxiranyl)methyl 2-methyl-2-propenoate and 7-oxabicyclo[4.1.0]hept-3-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125566-99-6

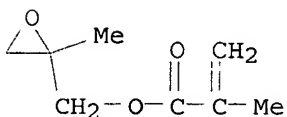
CMF C10 H14 O3



CM 2

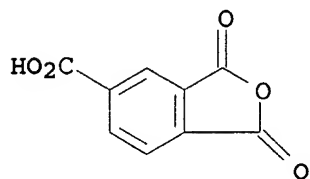
CRN 41768-20-1

CMF C8 H12 O3



CM 3

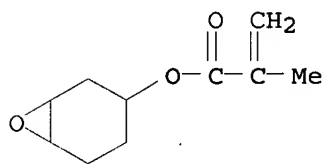
CRN 552-30-7
CMF C9 H4 O5



RN 207850-28-0 HCAPLUS
CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, polymer with (2-methyloxiranyl)methyl 2-methyl-2-propenoate, octadecyl 2-methyl-2-propenoate and 7-oxabicyclo[4.1.0]hept-3-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

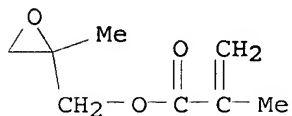
CM 1

CRN 125566-99-6
CMF C10 H14 O3



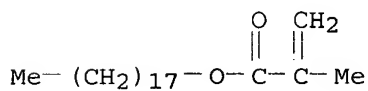
CM 2

CRN 41768-20-1
CMF C8 H12 O3



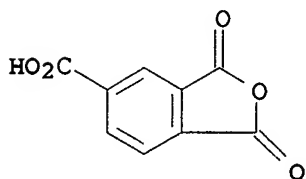
CM 3

CRN 32360-05-7
CMF C22 H42 O2



CM 4

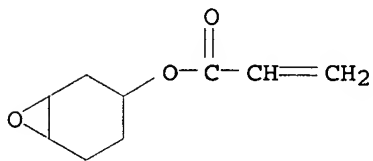
CRN 552-30-7
CMF C9 H4 O5



RN 207850-29-1 HCAPLUS
CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, polymer with
(2-methyloxiranyl)methyl 2-methyl-2-propenoate and 7-oxabicyclo[4.1.0]hept-
3-yl 2-propenoate (9CI) (CA INDEX NAME)

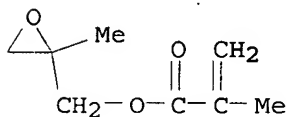
CM 1

CRN 131826-14-7
CMF C9 H12 O3



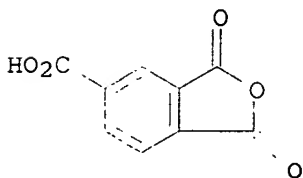
CM 2

CRN 41768-20-1
CMF C8 H12 O3



CM 3

CRN 552-30-7
CMF C9 H4 O5



L39 ANSWER 48 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1998:71738 HCAPLUS

DN 128:199672

TI Multilayer and high-density printed circuit boards with excellent wiring adhesion and manufacturing thereof

IN Matsumoto, Harumi; Kawamoto, Kenji; Tsurukawa, Naoichi; Watanabe, Jiro

PA Toppan Printing Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

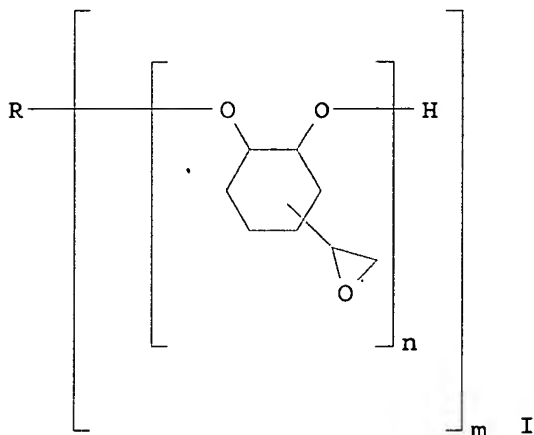
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10027963	A2	19980127	JP 1996-180623	19960710
PRAI	JP 1996-180623		19960710		
GI					



AB The claimed circuit boards, including alternately laminated layers of wiring circuit patterns and porous-anchored polymer insulator layers. The resin layers may comprise thermosetting epoxy resins containing ≥ 1 alicyclic epoxy compds. such as I (n, m = natural number; R = alkyl, amino). The manufacturing process involves preparing photosensitive polymer liqs.

containing
above epoxy compds., applying the liqs. on wiring substrates and curing, treating the surfaces with alkali solns., and forming wiring patterns by electroless- and electroplating.

IC ICM H05K003-46

ICS H05K003-46; H05K003-38; C08G059-20

CC 76-14 (Electric Phenomena)

Section cross-reference(s): 38

IT 190905-95-4P, 1-(Epoxyethyl)-3,4-epoxycyclohexane-phthalic anhydride-Epiclon HP 7200H-Ripoxo VR 90 copolymer

RL: DEV (Device component use); IMF (Industrial manufacture); PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation); USES (Uses)

(elec. insulators; multilayer and high-d. printed circuit boards with excellent wiring adhesion and manufacturing thereof)

IT 190905-95-4P, 1-(Epoxyethyl)-3,4-epoxycyclohexane-phthalic

anhydride-Epiclon HP 7200H-Ripoxy VR 90 copolymer

RL: DEV (Device component use); IMF (Industrial manufacture); PNU (Preparation, unclassified); PRP (Properties); **PREP (Preparation)**; **USES (Uses)**

(elec. insulators; multilayer and high-d. printed circuit boards with excellent wiring adhesion and manufacturing thereof)

RN 190905-95-4 HCAPLUS

CN 1,3-Isobenzofurandione, polymer with Epiclon HP 7200H, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer di-2-propenoate and 3-oxiranyl-7-oxabicyclo[4.1.0]heptane (9CI) (CA INDEX NAME)

CM 1

CRN 186844-72-4

CMF Unspecified

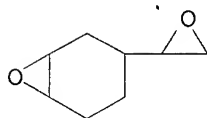
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 106-87-6

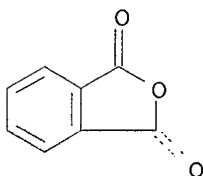
CMF C8 H12 O2



CM 3

CRN 85-44-9

CMF C8 H4 O3



CM 4

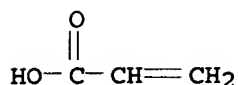
CRN 55127-80-5

CMF (C21 H24 O4)x . 2 C3 H4 O2

CM 5

CRN 79-10-7

CMF C3 H4 O2



CM 6

CRN 25085-99-8

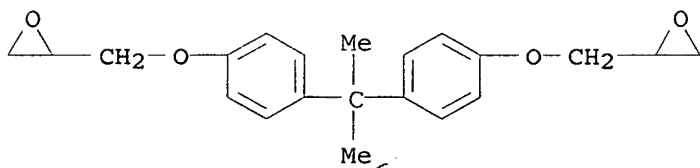
CMF (C21 H24 O4)x

CCI PMS

CM 7

CRN 1675-54-3

CMF C21 H24 O4



L39 ANSWER 49 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:424710 HCAPLUS

DN 127:51611

TI Photocurable and thermosetting polymer compositions with diluted alkali developability for electrically insulating layers in multilayer printed circuit boards

IN Akimoto, Satoshi; Kawamoto, Kenji; Tsurukawa, Naokazu; Matsumoto, Akimi

PA Toppan Printing Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09124767	A2	19970513	JP 1995-285086	19951101
PRAI	JP 1995-285086		19951101		

AB The comps. comprise (A) UV-curable polymers as photosensitive heat-resistant resin components obtained by treating (a) reaction products of bisphenol A epoxy compds. with unsatd. monocarboxylic acids and (b) (un)saturated polybasic acid anhydrides, (B) photopolymer. initiators, (C) dilutants, and (D) ≥ 2 epoxy compds. containing alicyclic ones and aromatic ones. Thus, UV-curable resin (obtained from Ripoxy VR 90 and phthalic anhydride; acid value 165 mg-KOH/g) 40, EHPE 3150 20, EOCN 4400 5, Sylysia 770 (SiO₂ powder) 10, a dispersant 0.5, a defoaming agent 0.5, and Darocur 4265 4 parts were kneaded with 20 parts Et cellosolve acetate to give a photosensitive resin solution, which was applied on a Cu-laminated glass epoxy substrate, dried, adhesion-exposed via a photomask, developed with 1% aqueous NaHCO₃, cured at 180° for 3 h to give a patterned elec. insulating layer with glass-transition temperature 190° and good adhesion of plating layers.

IC ICM C08G059-16

ICS C08G059-18; C08G059-32; C08K005-00; C08L063-10; G03F007-032;
H05K003-46

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 76

IT 190905-94-3P 190905-95-4P 190905-96-5P

RL: DEV (Device component use); IMF (Industrial manufacture); PRP
(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)

(photocurable and thermosetting polymer compns. with diluted alkali
developability for elec. insulating layers in multilayer printed
circuit boards)

IT 190905-94-3P 190905-95-4P 190905-96-5P

RL: DEV (Device component use); IMF (Industrial manufacture); PRP
(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)

(photocurable and thermosetting polymer compns. with diluted alkali
developability for elec. insulating layers in multilayer printed
circuit boards)

RN 190905-94-3 HCAPLUS

CN 1,3-Isobenzofurandione, polymer with EOCN 4400, 2,2'-[(1-
methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer
di-2-propenoate and 3-oxiranyl-7-oxabicyclo[4.1.0]heptane (9CI) (CA INDEX
NAME)

CM 1

CRN 133781-15-4

CMF Unspecified

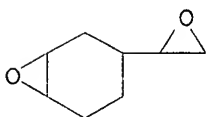
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 106-87-6

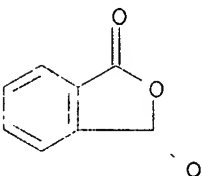
CMF C8 H12 O2



CM 3

CRN 85-44-9

CMF C8 H4 O3



CM 4

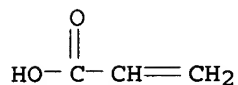
CRN 55127-80-5

CMF (C21 H24 O4)x . 2 C3 H4 O2

CM 5

CRN 79-10-7

CMF C3 H4 O2



CM 6

CRN 25085-99-8

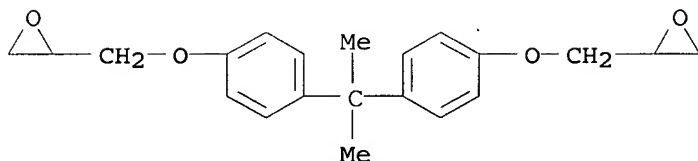
CMF (C21 H24 O4)x

CCI PMS

CM 7

CRN 1675-54-3

CMF C21 H24 O4



RN 190905-95-4 HCAPLUS

CN 1,3-Isobenzofurandione, polymer with Epiclon HP 7200H,
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]
homopolymer di-2-propenoate and 3-oxiranyl-7-oxabicyclo[4.1.0]heptane
(9CI) (CA INDEX NAME)

CM 1

CRN 186844-72-4

CMF Unspecified

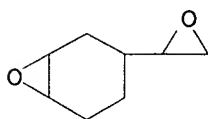
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 106-87-6

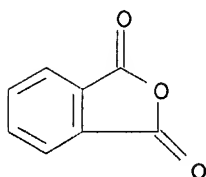
CMF C8 H12 O2



CM 3

CRN 85-44-9

CMF C8 H4 O3



CM 4

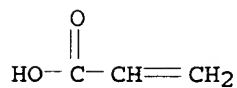
CRN 55127-80-5

CMF (C21 H24 O4)x . 2 C3 H4 O2

CM 5

CRN 79-10-7

CMF C3 H4 O2



CM 6

CRN 25085-99-8

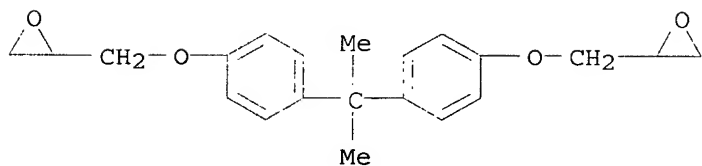
CMF (C21 H24 O4)x

CCI PMS

CM 7

CRN 1675-54-3

CMF C21 H24 O4



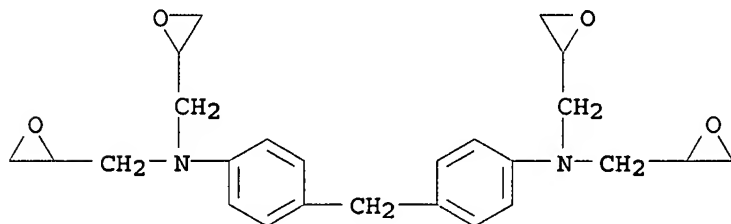
RN 190905-96-5 HCAPLUS

CN 1,3-Isobenzofurandione, polymer with N,N'-(methylenedi-4,1-phenylene)bis[N-(oxiranylmethyl)oxiranemethanamine], 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer di-2-propenoate and 3-oxiranyl-7-oxabicyclo[4.1.0]heptane (9CI) (CA INDEX NAME)

CM 1

CRN 28768-32-3

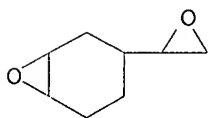
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CM 2

CRN 106-87-6

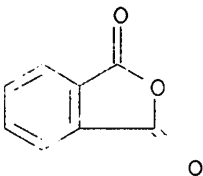
CMF C8 H12 O2



CM 3

CRN 85-44-9

CMF C8 H4 O3



CM 4

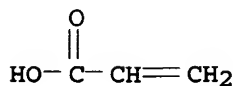
CRN 55127-80-5

CMF (C21 H24 O4)x . 2 C3 H4 O2

CM 5

CRN 79-10-7

CMF C3 H4 O2

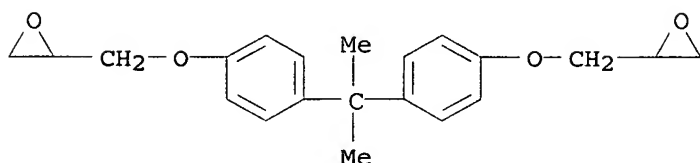


CM 6

CRN 25085-99-8
 CMF (C21 H24 O4)x
 CCI PMS

CM 7

CRN 1675-54-3
 CMF C21 H24 O4



L39 ANSWER 50 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:241754 HCAPLUS

DN 124:292389

TI Manufacture of coating materials with good haze resistance

IN Eguchi, Juji; Nomura, Shigeki

PA Sekisui Chemical Co. Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

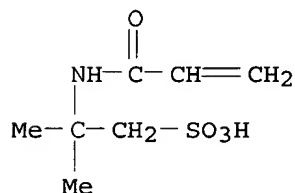
LA Japanese

FAN.CNT 1

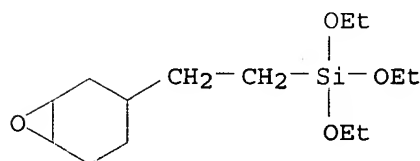
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08027290	A2	19960130	JP 1994-166722	19940719
PRAI	JP 1994-166722		19940719		
OS	MARPAT 124:292389				

AB In first stage of the manufacture, compns. containing silane coupling agents XSiR1R2R3 (R1-3 = lower alkyl, alkoxy; ≥1 of R1-3 = lower alkoxy; X = epoxy-terminated lower alkyl), hydrophobic polyfunctional (meth)acrylates with ≥2 (meth)acryloyl, ≥2 carboxyl-containing compds., and (A) photopolymer. initiators are coated on plastic or inorg. substrates and heat-cured to give layers, and in second stage, the layers are contacted with compns. containing hydrophilic monomers with ≥1 (meth)acryloyl and A, irradiated with active ray, and photocured to give title materials with good hot water resistance, useful for automobile front glass, optical materials, etc. Thus, KBM 403 5, trimellitic anhydride 1.5, Kayarad PET 30 5, Irgacure 184 0.2, and Kayacure EPA 0.1 g were mixed, coated on a glass plate, heated at 120° for 2 h, dipped in composition containing 5 g TBAS-Q, 200 mg Irgacure 184, and 100 mg Kayacure EPA, and UV-irradiated to give a test piece showing good haze and hot water resistance.

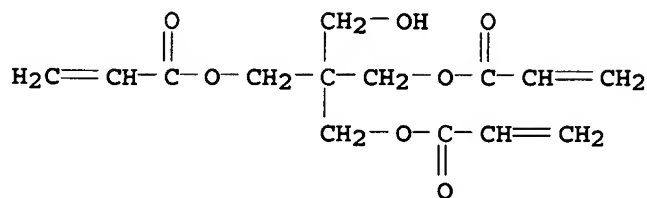
IC ICM C08J007-04
 ICS B32B027-00; B32B027-16; C03C017-34; C09D004-02; C09K003-18
 CC 42-2 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 38
 IT 176093-08-6P 176093-09-7P **176093-10-0P** 176093-11-1P
 RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; PROC (Process); USES (Uses)
 (haze-resistant coatings containing silane coupling agents, (meth)acrylates, carboxyl compds., and photopolymn. initiators, useful for optical materials)
 IT **176093-10-0P**
 RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; PROC (Process); USES (Uses)
 (haze-resistant coatings containing silane coupling agents, (meth)acrylates, carboxyl compds., and photopolymn. initiators, useful for optical materials)
 RN 176093-10-0 HCAPLUS
 CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, polymer with 2-(hydroxymethyl)-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and triethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)
 CM 1
 CRN 15214-89-8
 CMF C7 H13 N O4 S



CM 2
 CRN 10217-34-2
 CMF C14 H28 O4 Si



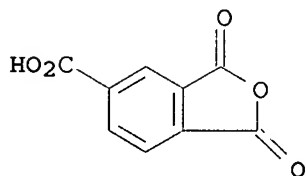
CM 3
 CRN 3524-68-3
 CMF C14 H18 O7



CM 4

CRN 552-30-7

CMF C9 H4 O5



L39 ANSWER 51 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:781756 HCAPLUS

DN 123:171948

TI Filament-winding compositions and fiber-resin composites prepared from them

IN Klemarczyk, Philip T.; Okamoto, Yoshihisa; Moran, James P., Jr.

PA Loctite Corp., USA

SO PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9421455	A1	19940929	WO 1994-US3452	19940324
	W: AU, BR, CA, JP, KR				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5539012	A	19960723	US 1993-108437	19930818
	AU 9464184	A1	19941011	AU 1994-64184	19940324
	AU 675310	B2	19970130		
	EP 642416	A1	19950315	EP 1994-911743	19940324
	EP 642416	B1	20031001		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 07507836	T2	19950831	JP 1994-521402	19940324
	BR 9404724	A	19990615	BR 1994-4724	19940324
	AT 251034	E	20031015	AT 1994-911743	19940324
PRAI	US 1993-36325	A	19930324		
	US 1993-108437	A	19930818		
	WO 1994-US3452	W	19940324		

AB Resin compns. useful for filament winding comprise ≥ 1 polyepoxide resin curable by heat, ≥ 1 polyolefinically unsatd. monomer curable by actinic radiation, ≥ 1 photoinitiator, ≥ 1 organic peroxide having a 10-h decomposition half-life at 50-104°, a heat-activated

curing agent, and, optionally, a cyanate ester. The compns. have a viscosity of <2000 cP and retain this viscosity for ≥2 h at about ambient temperature to about 60°. The cyanate ester resin compns. retain a viscosity of <2000 cP for ≥6 mo at ambient temperature. The resins can be immobilized by actinic radiation and further heat-cured without substantial resin drip. The compns. maintain stable low pot-life viscosities for a significant period of time, exhibit relatively high glass transition temps., and gives products with uniform properties (no drip or flow during heat-curing).

IC ICM B32B017-02

ICS B32B017-04; B32B019-02; B32B023-02; B32B027-02; B32B027-04;
C08F002-50; C08L063-02; C08L063-04; C08L063-06; C08L063-10

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 40

IT 167476-25-7P 167476-26-8P 167476-27-9P 167476-28-0P 167476-29-1P
167476-30-4P 167568-66-3P 167568-67-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP** (Preparation); **USES** (Uses)
(filament winding compns.)

IT 167568-67-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP** (Preparation); **USES** (Uses)
(filament winding compns.)

RN 167568-67-4 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with Epi-Rez 5027, 2-[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], 1,2-propanediol mono(2-methyl-2-propenoate) and (3α,4α,7α,7α)-3a,4,7,7a-tetrahydromethyl-4,7-methanoisobenzofuran-1,3-dione (9CI) (CA INDEX NAME)

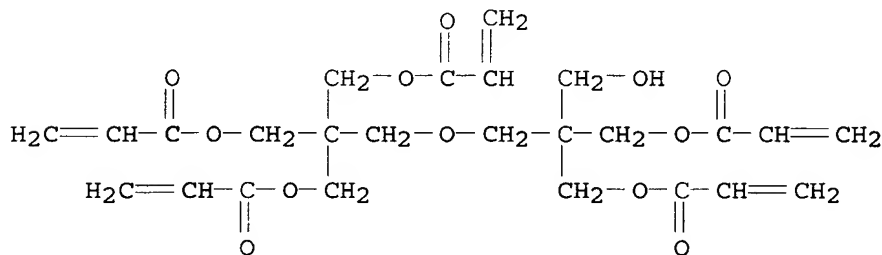
CM 1

CRN 66419-28-1
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

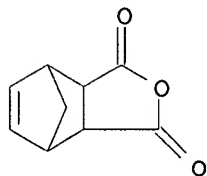
CM 2

CRN 60506-81-2
CMF C25 H32 O12



CM 3

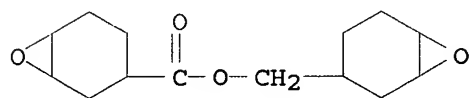
CRN 25134-21-8
 CMF C10 H10 O3
 CCI IDS



D1- Me

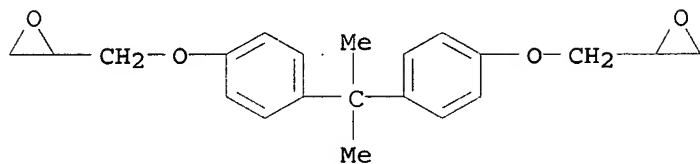
CM 4

CRN 2386-87-0
 CMF C14 H20 O4



CM 5

CRN 1675-54-3
 CMF C21 H24 O4

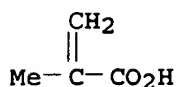


CM 6

CRN 27813-02-1
 CMF C7 H12 O3
 CCI IDS

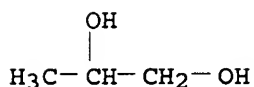
CM 7

CRN 79-41-4
 CMF C4 H6 O2



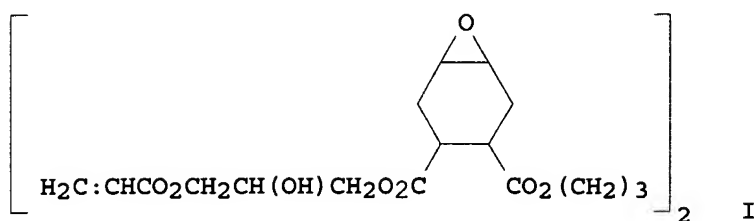
CM 8

CRN 57-55-6
CMF C3 H8 O2



L39 ANSWER 52 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1995:444028 HCAPLUS
DN 122:291728
TI New (cyclo)aliphatic compounds containing epoxide and acrylate groups
IN Steinmann, Bettina; Wolf, Jean Pierre; Schulthess, Adrian; Hunziker, Max
PA Ciba-Geigy A.-G., Switz.
SO Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 604364	A2	19940629	EP 1993-810871	19931213
	EP 604364	A3	19950104		
	EP 604364	B1	19980225		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
	AT 163438	E	19980315	AT 1993-810871	19931213
	ES 2114601	T3	19980601	ES 1993-810871	19931213
	JP 06228271	A2	19940816	JP 1993-344818	19931220
	US 5468886	A	19951121	US 1993-169938	19931220
	CA 2112010	AA	19940624	CA 1993-2112010	19931221
	CA 2112010	C	20000307		
	AU 9352639	A1	19940707	AU 1993-52639	19931222
	AU 672645	B2	19961010		
	US 5599651	A	19970204	US 1995-517888	19950821
	AU 9710090	A1	19970306	AU 1997-10090	19970109
	AU 683002	B2	19971023		
PRAI	CH 1992-3943	A	19921223		
	US 1993-169938	A3	19931220		
OS	MARPAT 122:291728				
GI					



AB The title compds. are prepared for use in coatings, adhesives, and photoresists and in stereolithog. Esterification of 0.5 mol tetrahydrophthalic anhydride in turn with 0.25 mol 1,6-hexanediol and 0.5 mol glycidyl acrylate and oxidation of the product by AcOOH gave the diacrylate-diepoxide I.

IC ICM C08G059-17

ICS C07D303-12; C08L063-10; G03F007-038

CC 35-2 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 37, 38, 42, 74

IT 111-46-6, reactions 629-11-8, 1,6-Hexanediol 5675-51-4, 1,12-Dodecanediol 25322-68-3 27697-57-0 37353-75-6, Dianol 3310
RL: RCT (Reactant); RACT (Reactant or reagent)

(esterification with tetrahydrophthalic anhydride)

IT 106-91-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(esterification with tetrahydrophthalic anhydride monoesters)

IT 106-90-1DP, Glycidyl acrylate, esters with hexenedioic acid and aliphatic diols, epoxidized 110-63-4DP, 1,4-Butanediol, esters with hexenedioic acid and glycidyl acrylate, epoxidized 29311-53-3DP, trans-3-Hexenedioic acid, esters with butanediol and glycidyl acrylate, epoxidized
161787-85-5P 161787-86-6P 161787-87-7P 161787-88-8P
161787-89-9P 161787-90-2P 161787-91-3P 163363-58-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation and uses of photocurable)

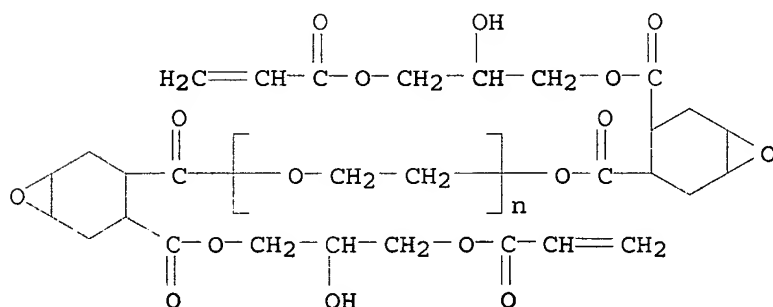
IT 161787-88-8P 163363-58-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation and uses of photocurable)

RN 161787-88-8 HCAPLUS

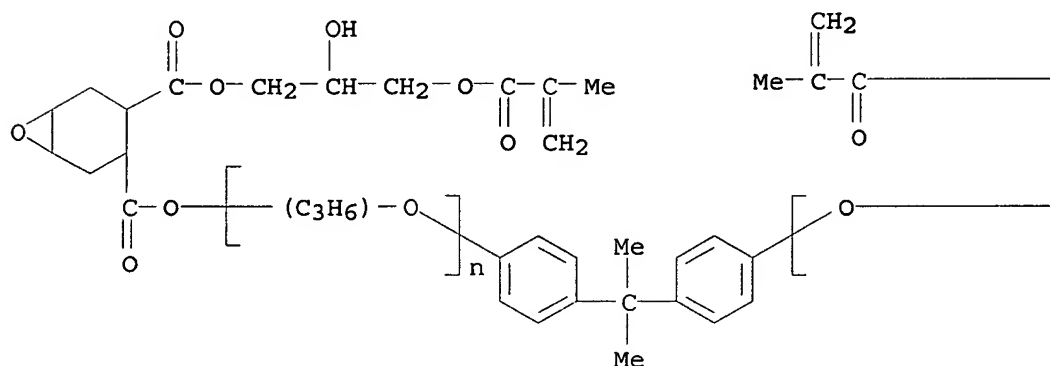
CN Poly(oxy-1,2-ethanediyl), α -[[4-[[2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propoxy]carbonyl]-7-oxabicyclo[4.1.0]hept-3-yl]carbonyl]- ω -[[4-[[2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propoxy]carbonyl]-7-oxabicyclo[4.1.0]hept-3-yl]carbonyl]oxy]- (9CI) (CA INDEX NAME)



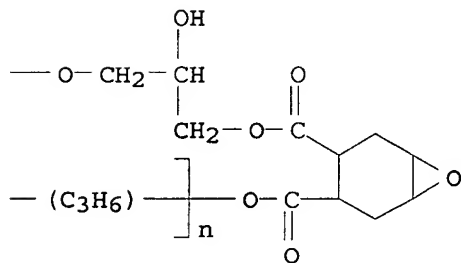
RN 163363-58-4 HCAPLUS

CN Poly[oxy(methyl-1,2-ethanediyl)], α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -[[[4-[2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propoxy]carbonyl]-7-oxabicyclo[4.1.0]hept-3-yl]carbonyl]oxy]-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L39 ANSWER 53 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:331328 HCAPLUS

DN 122:293566

TI Curable polymer compositions and their use for coating automobile bodies and metals

IN Azuma, Ichiro; Iwamura, Goro

PA Dainippon Ink & Chemicals, Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06299080	A2	19941025	JP 1993-84468	19930412
	JP 3517893	B2	20040412		
PRAI	JP 1993-84468		19930412		

AB The title compns., curable at low temperature to give coatings with good appearance and acid resistance, contain vinyl copolymers containing ≥ 1 siloxy and ≥ 1 epoxy group/mol. and compds. containing ≥ 2

anhydride groups/mol. The compns. optionally contain ≥ 1 vinyl copolymer, polyester, and/or **polyether** containing ≥ 2 siloxy groups/mol. and vinyl copolymers containing ≥ 1 **anhydride** and ≥ 1 epoxy group/mol. The compns. are useful for intermediate clear layers in multilayer coatings. A composition contained a styrene-triethylsiloxyethyl methacrylate-Bu methacrylate-Bu acrylate-glycidyl methacrylate copolymer and a styrene-Bu methacrylate-itaconic **anhydride** copolymer.

IC ICM C08L101-10

ICS B05D001-38; B05D007-24; C08L101-02

CC 42-10 (Coatings, Inks, and Related Products)

IT Alkyd resins

Polyesters, uses

Polyethers, uses

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(in curable polymer compns. for coatings on automobile bodies and metals)

IT 75-77-4DP, Trimethylchlorosilane, reaction products with carboxy and glycidyl group-containing polyesters 999-97-3DP, reaction products with polypropylene glycol 25322-69-4DP, Polypropylene glycol, reaction products with silazane 86957-76-8P 163073-57-2P **163073-58-3P**

163073-59-4P 163073-60-7P 163073-61-8P 163155-36-0P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(in curable polymer compns. for coatings on automobile bodies and metals)

IT **163073-58-3P**

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)

(in curable polymer compns. for coatings on automobile bodies and metals)

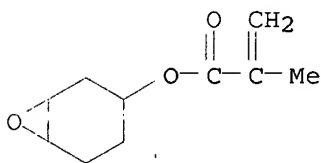
RN 163073-58-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 7-oxabicyclo[4.1.0]hept-3-yl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2-[(triethylsilyl)oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125566-99-6

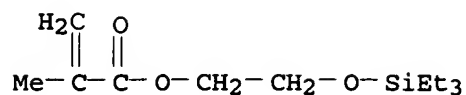
CMF C10 H14 O3



CM 2

CRN 18141-60-1

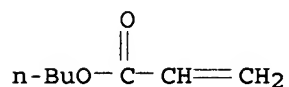
CMF C12 H24 O3 Si



CM 3

CRN 141-32-2

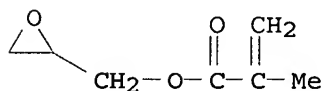
CMF C7 H12 O2



CM 4

CRN 106-91-2

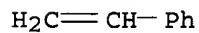
CMF C7 H10 O3



CM 5

CRN 100-42-5

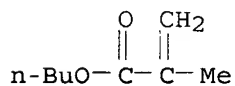
CMF C8 H8



CM 6

CRN 97-88-1

CMF C8 H14 O2



L39 ANSWER 54 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1994:566998 HCAPLUS
 DN 121:166998
 TI Radiation-curable resin compositions and their cured products
 IN Yokoshima, Minoru
 PA Nippon Kayaku Kk, Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06145272	A2	19940524	JP 1992-324651	19921111
PRAI	JP 1992-324651		19921111		

AB The title water developable and water dilutable UV- or electron beam-curable compns. which give cured products resistant to water, solvents, and chems., contain (A) reaction products of (a) polyester polycarboxylic acids containing carboxybetaine-type tertiary ammonium salt groups and (b) compds. containing 1 epoxy group and (meth)acryloyl groups, (B) reactive diluents and/or water, and optionally (C) photopolymer. initiators. Thus, heating at 200-220° 354 parts HOCH₂CH₂N+Me(CH₂CO₂-)CH₂CH₂OH and 100 parts succinic anhydride, removing 18 parts water, cooling to 90°, adding 308 parts hexahydrophthalic anhydride, and treating at 140° gave a polyester dicarboxylic acid with acid value 150.8 mg KOH/g, which was cooled to 80°, blended with 390 parts Cyclomer A 200 (3,4-epoxyhexahydrobenzyl acrylate) and 4.1 parts PPh₃, and heated at 95° for 24 h to give reaction product A-1. A composition resol. in water, comprising A-1 70, polyethylene glycol diacrylate 10, water 30, and Darocur 2959 5 parts was applied 50-μm thick on a soft steel plate, dried at 40° for 10 min, and exposed to UV-irradiation to give a cured coating with resistant to water, acetone, and 1% NaOH. SUS 304 specimen immersed into the coating at 60° for 7 days showed no corrosion.

IC ICM C08F299-02

ICA C08G063-91

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 42

IT 157465-98-0P 157466-00-7P 157466-01-8P

157466-03-0P 157567-97-0P 157567-98-1P

RL: PREP (Preparation)

(preparation of, water-soluble and radiation-curable, water-resistant when cured)

IT 157465-98-0P 157466-00-7P 157466-01-8P

157466-03-0P 157567-97-0P 157567-98-1P

RL: PREP (Preparation)

(preparation of, water-soluble and radiation-curable, water-resistant when cured)

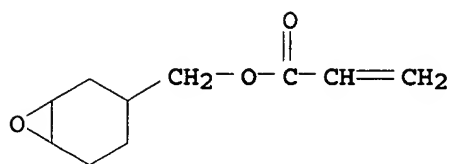
RN 157465-98-0 HCAPLUS

CN Ethanaminium, N-(carboxymethyl)-2-hydroxy-N-(2-hydroxyethyl)-N-methyl-, inner salt, polymer with dihydro-2,5-furandione, hexahydro-1,3-isobenzofurandione, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate and α-(1-oxo-2-propenyl)-ω-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 64630-63-3

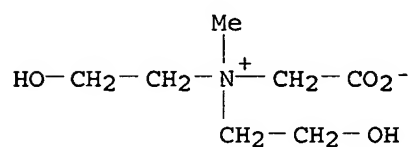
CMF C10 H14 O3



CM 2

CRN 30098-67-0

CMF C7 H15 N O4

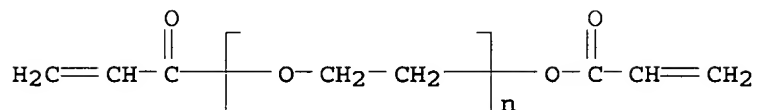


CM 3

CRN 26570-48-9

CMF (C2 H4 O)n C6 H6 O3

CCI PMS



CM 4

CRN 108-30-5

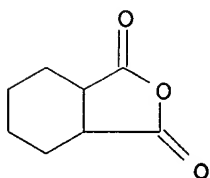
CMF C4 H4 O3



CM 5

CRN 85-42-7

CMF C8 H10 O3



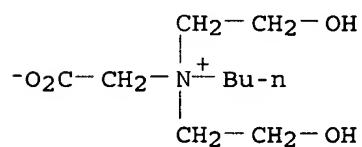
RN 157466-00-7 HCAPLUS

CN 1-Butanaminium, N-(carboxymethyl)-N,N-bis(2-hydroxyethyl)-, inner salt, polymer with 2,5-furandione, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate and α -(1-oxo-2-propenyl)- ω -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 157465-99-1

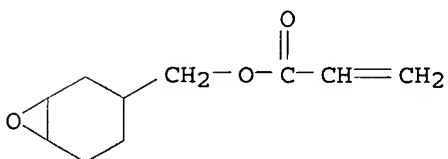
CMF C10 H21 N O4



CM 2

CRN 64630-63-3

CMF C10 H14 O3

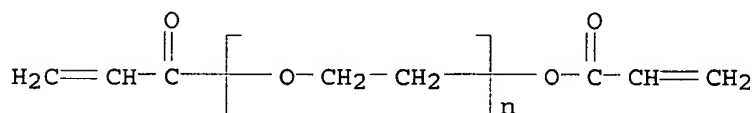


CM 3

CRN 26570-48-9

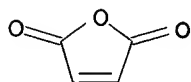
CMF (C2 H4 O)_n C6 H6 O3

CCI PMS



CM 4

CRN 108-31-6
CMF C4 H2 O3

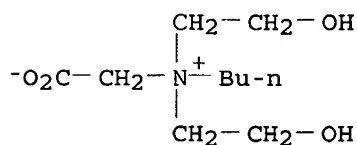


RN 157466-01-8 HCAPLUS

CN Ethanaminium, N-butyl-N-(carboxymethyl)-2-hydroxy-N-(2-hydroxyethyl)-, inner salt, polymer with N-(carboxymethyl)-2-hydroxy-N-(2-hydroxyethyl)-N-methylethanaminium inner salt, dihydro-2,5-furandione, 2,5-furandione, hexahydro-1,3-isobenzofurandione, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate and α -(1-oxo-2-propenyl)- ω -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

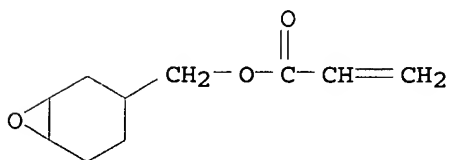
CM 1

CRN 157465-99-1
CMF C10 H21 N O4



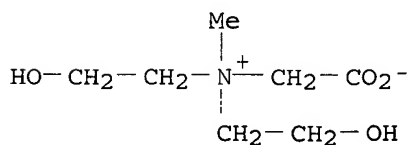
CM 2

CRN 64630-63-3
CMF C10 H14 O3



CM 3

CRN 30098-67-0
CMF C7 H15 N O4

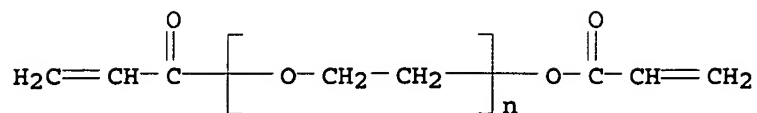


CM 4

CRN 26570-48-9

CMF (C2 H4 O)_n C6 H6 O3

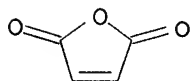
CCI PMS



CM 5

CRN 108-31-6

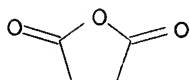
CMF C4 H2 O3



CM 6

CRN 108-30-5

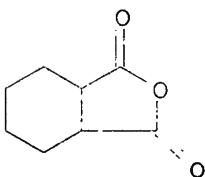
CMF C4 H4 O3



CM 7

CRN 85-42-7

CMF C8 H10 O3



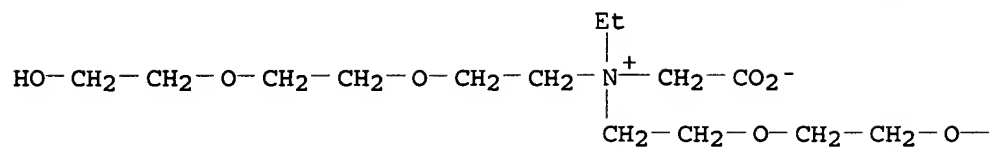
RN 157466-03-0 HCAPLUS

CN 1-Butanaminium, N-(carboxymethyl)-N,N-bis(2-hydroxyethyl)-, inner salt, polymer with N-(carboxymethyl)-N-ethyl-2-[2-(2-hydroxyethoxy)ethoxy]-N-[2-[2-(2-hydroxyethoxy)ethoxy]ethyl]ethanaminium inner salt, 2,5-furandione, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate and 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI) (CA INDEX NAME)

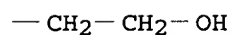
CM 1

CRN 157466-02-9
CMF C16 H33 N O8

PAGE 1-A

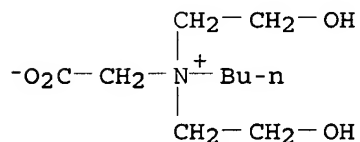


PAGE 1-B



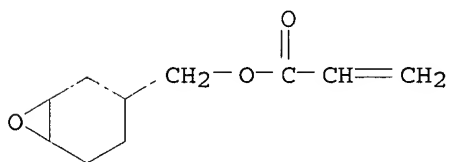
CM 2

CRN 157465-99-1
CMF C10 H21 N O4



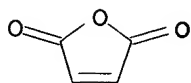
CM 3

CRN 64630-63-3
CMF C10 H14 O3



CM 4

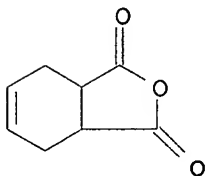
CRN 108-31-6
CMF C4 H2 O3



CM 5

CRN 85-43-8

CMF C8 H8 O3



RN 157567-97-0 HCAPLUS

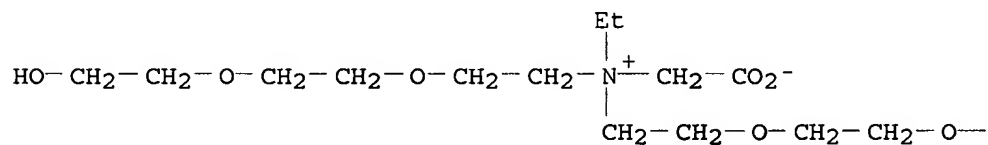
CN Ethanaminium, N-(carboxymethyl)-N-ethyl-2-[2-(2-hydroxyethoxy)ethoxy]-N-[2-[2-(2-hydroxyethoxy)ethoxy]ethyl]-, inner salt, polymer with 2-hydroxyethyl 2-propenoate, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate, 1,2,3-propanetriol mono-2-propenoate and 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI) (CA INDEX NAME)

CM 1

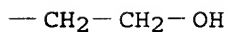
CRN 157466-02-9

CMF C16 H33 N O8

PAGE 1-A



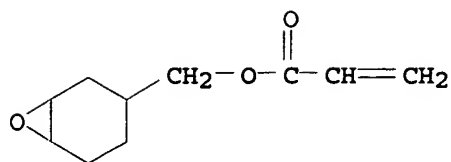
PAGE 1-B



CM 2

CRN 64630-63-3

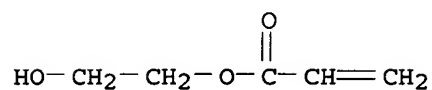
CMF C10 H14 O3



CM 3

CRN 818-61-1

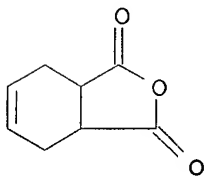
CMF C5 H8 O3



CM 4

CRN 85-43-8

CMF C8 H8 O3



CM 5

CRN 52357-34-3

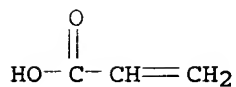
CMF C6 H10 O4

CCI IDS

CM 6

CRN 79-10-7

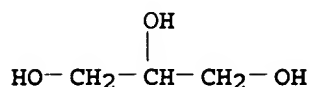
CMF C3 H4 O2



CM 7

CRN 56-81-5

CMF C3 H8 O3



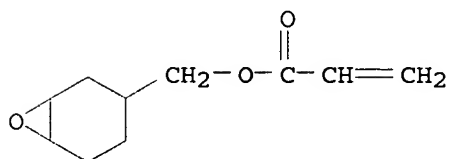
RN 157567-98-1 HCAPLUS

CN Ethanaminium, N-(carboxymethyl)-2-hydroxy-N-(2-hydroxyethyl)-N-methyl-, inner salt, polymer with dihydro-2,5-furandione, hexahydro-1,3-isobenzofurandione, 7-oxabicyclo[4.1.0]hept-3-ylmethyl 2-propenoate, α -(1-oxo-2-propenyl)- ω -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) and 1,2,3-propanetriol mono-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 64630-63-3

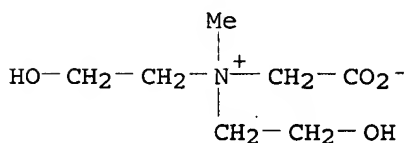
CMF C10 H14 O3



CM 2

CRN 30098-67-0

CMF C7 H15 N O4

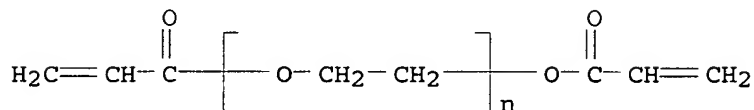


CM 3

CRN 26570-48-9

CMF (C2 H4 O)_n C6 H6 O3

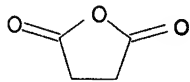
CCI PMS



CM 4

CRN 108-30-5

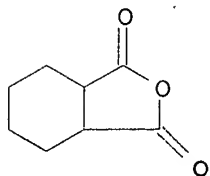
CMF C4 H4 O3



CM 5

CRN 85-42-7

CMF C8 H10 O3



CM 6

CRN 52357-34-3

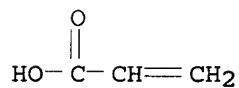
CMF C6 H10 O4

CCI IDS

CM 7

CRN 79-10-7

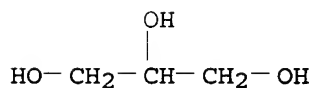
CMF C3 H4 O2



CM 8

CRN 56-81-5

CMF C3 H8 O3



L39 ANSWER 55 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1994:9691 HCAPLUS

DN 120:9691

TI Polymer compositions based on compounds bearing vinyl and epoxy groups, their modification and uses

IN Harano, Yoshiyuki; Namai, Sozo; Maeda, Katsuyuki; Murai, Takaaki

PA Daicel Chemical Industries, Ltd., Japan
SO Eur. Pat. Appl., 56 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 540027	A2	19930505	EP 1992-118618	19921030
	EP 540027	A3	19950607		
	EP 540027	B1	19990609		
	R: CH, DE, FR, GB, IT, LI, NL				
	JP 05117314	A2	19930514	JP 1991-286444	19911031
	JP 05140270	A2	19930608	JP 1991-300369	19911115
	JP 06001934	A2	19940111	JP 1992-161032	19920619
	JP 06001829	A2	19940111	JP 1992-161033	19920619
	JP 06033012	A2	19940208	JP 1992-187086	19920714
	JP 06032868	A2	19940208	JP 1992-193870	19920721
	JP 06080764	A2	19940322	JP 1992-235676	19920903
	JP 06080922	A2	19940322	JP 1992-237231	19920904
	JP 06095380	A2	19940408	JP 1992-243466	19920911
	JP 06100800	A2	19940412	JP 1992-251549	19920921
	JP 06116348	A2	19940426	JP 1992-264592	19921002
	EP 859021	A2	19980819	EP 1998-106076	19921030
	EP 859021	A3	19981111		
	R: CH, DE, FR, GB, IT, LI, NL				
	JP 06041275	A2	19940215	JP 1993-40864	19930302
	JP 3287899	B2	20020604		
	JP 06049115	A2	19940222	JP 1993-99992	19930427
	JP 3457024	B2	20031014		
	US 5494977	A	19960227	US 1994-342784	19941121
	US 5510428	A	19960423	US 1994-342633	19941121
PRAI	JP 1991-286444	A	19911031		
	JP 1991-300369	A	19911115		
	JP 1992-83739	A	19920406		
	JP 1992-117296	A	19920511		
	JP 1992-161032	A	19920619		
	JP 1992-161033	A	19920619		
	JP 1992-187086	A	19920714		
	JP 1992-193870	A	19920721		
	JP 1992-235676	A	19920903		
	JP 1992-237231	A	19920904		
	JP 1992-243466	A	19920911		
	JP 1992-251549	A	19920921		
	JP 1992-264592	A	19921002		
	US 1992-968380	B1	19921029		
	EP 1992-118618	A3	19921030		
	US 1993-90769	B1	19930713		
AB	The title compns. useful for encapsulation, solder-resist inks, coatings, etc. are obtained initially from (a) the title compds., e.g. glycidyl vinyl compds., (b) polybasic carboxylic acids, their anhydrides or COOH-containing polymers, and (c) compds. containing active H atoms, or (d) unsatd. carboxylic acids for thermal- and radical-curing properties, etc. Modification of the polymers is done via peroxidn. of vinyl groups to epoxy groups. An oligomer was prepared from BuOH, hexahydrophthalic anhydride (I) and 4-vinylcyclohexene-1-epoxide (II) to give a Bu-terminated polyester of I and II.				
IC	ICM C08L063-00				
	ICS C08G059-17; C08G065-26; C08G065-14; C08G065-32				
CC	37-6 (Plastics Manufacture and Processing)				

Section cross-reference(s): 42, 74

ST vinyl epoxide carboxylic anhydride copolymer; hexahydrophthalic anhydride vinylcyclohexene epoxide copolymer butylate

IT 151687-81-9P 151704-52-8P 151704-53-9P 151753-57-0DP, reaction product with dimethylbenzylamine, peroxidized 151753-57-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and peroxidn. of)

IT 80-62-6DP, polymers with peroxidized reaction products of epoxydecene and methacrylic acid 103-11-7DP, polymers with peroxidized reaction products of epoxydecene and methacrylic acid 151687-81-9DP, peroxidized 151687-85-3DP, reaction products with methacrylic acid, peroxidized, polymers with methacrylates 151704-52-8DP, peroxidized 151704-53-9DP, peroxidized
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and use of, in coating, encapsulation and resist ink)

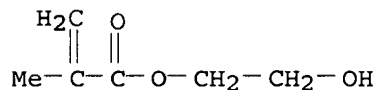
IT 151687-81-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and peroxidn. of)

RN 151687-81-9 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane, 3-ethenyl-, homopolymer, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9
 CMF C6 H10 O3

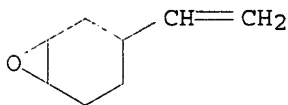


CM 2

CRN 29829-07-0
 CMF (C8 H12 O)x
 CCI PMS

CM 3

CRN 106-86-5
 CMF C8 H12 O



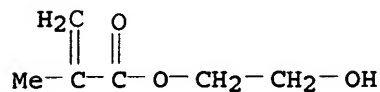
IT 151687-81-9DP, peroxidized
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and use of, in coating, encapsulation and resist ink)

RN 151687-81-9 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane, 3-ethenyl-, homopolymer, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9
CMF C6 H10 O3

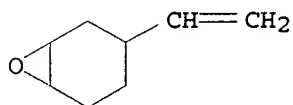


CM 2

CRN 29829-07-0
CMF (C8 H12 O)x
CCI PMS

CM 3

CRN 106-86-5
CMF C8 H12 O



L39 ANSWER 56 OF 59 HCAPLUS. COPYRIGHT 2006 ACS on STN

AN 1991:520103 HCAPLUS

DN 115:120103

TI Graft copolymers for diapers and sanitary napkins

IN Engelhardt, Friedrich; Riegel, Ulrich

PA Cassella A.-G., Germany

SO Ger. Offen., 9 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3911433	A1	19901011	DE 1989-3911433	19890407
	EP 400283	A2	19901205	EP 1990-104966	19900316
	EP 400283	A3	19920108		
	EP 400283	B1	19950111		
	R: BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
	US 5011892	A	19910430	US 1990-498722	19900326
	FI 97475	B	19960913	FI 1990-1492	19900326
	FI 97475	C	19961227		
	CA 2013115	AA	19901007	CA 1990-2013115	19900327
	CA 2013115	C	19991116		
	JP 03020313	A2	19910129	JP 1990-90518	19900406
	JP 2986837	B2	19991206		
PRAI	DE 1989-3911433	A	19890407		

AB Hydrophilic swellable graft copolymers comprise 0.5-20% XO(CR1CH2O)nY (X = alkyl, aryl, aralkyl, Y; Y = COMe, SO3H, COCHMe, CO2R2, etc.; R1 = H, Me; R2 = R1, Et; n = 2-300), 79-99% CHR4:CHR2R3 (R3 = CO2H, sulfonyl, phosphonyl, etc.; R4 = R2, CO2H), and 0.1-2% crosslinking agent. The

polymers are usable for sanitary napkins, diapers, and similar articles. A copolymer (40 g) made of 312 g propylene oxide-ethylene oxide block copolymer and 20 g succinic anhydride was added to a dispersion of 1910 g acrylic acid in 1493 g NaHCO₃-containing 4920 g water, followed by the addition of 20 g trimethylolpropane triacrylate in 20 g polyethylene glycol, 10 g Na diisooctylsulfosuccinate, 30 g cycloaliph. epoxide (Diepoxide), 2.2 g 2,2'-azabisamidinopropane-2HCl in 20 g H₂O, 4.4 g K₂O₂·2H₂SO₄ in 170 g water and 6 g Na pyrosulfite in 120 g water. Heating at 85° resulted in a graft copolymer, usable in diapers.

IC ICM C08F283-06

ICS A61F013-15; A61F013-20; B01J020-26

ICA C08G065-32; C09K017-00

ICI C08F283-06, C08F220-04, C08F220-58, C08F222-02, C08F228-02, C08F230-02

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

IT 79-10-7DP, 2-Propenoic acid, polymers with acrylamidomethylpropansulfonate and acrylates and ethoxylated nonylphenyl ether 79-41-4DP, polymers with acrylamidomethylpropansulfonate and acrylate and ethoxylated nonylphenyl ether 1746-03-8DP, esters, polymers with acrylates and acrylamidomethylpropansulfonate and ethoxylated nonylphenyl ether 15214-89-8DP, polymers with and acrylates and ethoxylated nonylphenyl ether 15625-89-5DP, polymers with acrylamidomethylpropansulfonate and acrylates and ethoxylated nonylphenyl ether 54612-40-7DP, polymers with acrylates and vinyl phosphorylate 134288-44-1P 134338-18-4P 134338-19-5P 134366-92-0P 134366-94-2P 134423-59-9P 134423-61-3P 134423-62-4P 134423-63-5P 134423-65-7P 134423-67-9P 134423-68-0P 134423-69-1P 134423-70-4P 134423-71-5P 134423-72-6P 134460-36-9P 134708-58-0P 135899-49-9P 135936-42-4P 135936-43-5P 135936-44-6P 135936-45-7P

RL: PREP (Preparation)

(preparation of, as absorbent material, for diapers and sanitary napkins)

IT 135899-49-9P 135936-42-4P 135936-43-5P

135936-44-6P 135936-45-7P

RL: PREP (Preparation)

(preparation of, as absorbent material, for diapers and sanitary napkins)

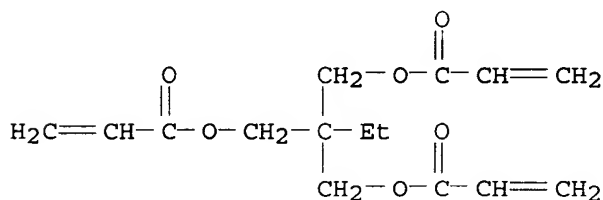
RN 135899-49-9 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, α-hydro-ω-hydroxypoly[oxy(methyl-1,2-ethanediyl)] acetate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

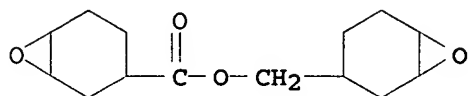
CRN 15625-89-5

CMF C15 H20 O6



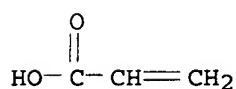
CM 2

CRN 2386-87-0
CMF C14 H20 O4



CM 3

CRN 79-10-7
CMF C3 H4 O2

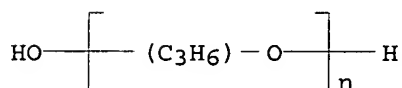


CM 4

CRN 76688-63-6
CMF (C3 H6 O)_n H2 O . x C2 H4 O2

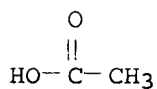
CM 5

CRN 25322-69-4
CMF (C3 H6 O)_n H2 O
CCI IDS, PMS



CM 6

CRN 64-19-7
CMF C2 H4 O2



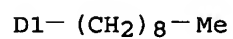
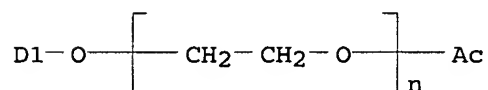
RN 135936-42-4 HCAPLUS
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with α -acetyl- ω -(nonylphenoxy)poly(oxy-1,2-ethanediyl), 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 54612-40-7

CMF (C2 H4 O)_n C17 H26 O2

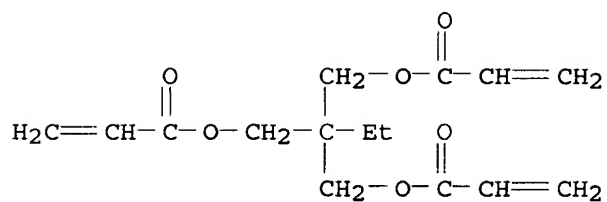
CCI IDS, PMS



CM 2

CRN 15625-89-5

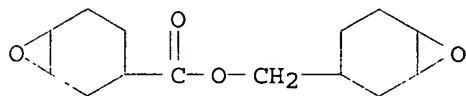
CMF C15 H20 O6



CM 3

CRN 2386-87-0

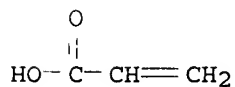
CMF C14 H20 O4



CM 4

CRN 79-10-7

CMF C3 H4 O2



RN 135936-43-5 HCAPLUS

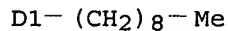
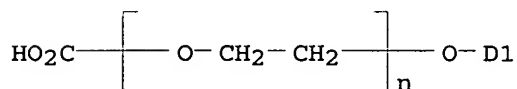
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with α -carboxy- ω -(nonylphenoxy)poly(oxy-1,2-ethanediyl), 2-ethyl-2-[[1-oxo-2-propenyl]oxy]methyl-1,3-propanediyl di-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 134423-66-8

$$\text{CMF} \quad (\text{C}_2 \text{ H}_4 \text{ O})_n \text{ C}_{16} \text{ H}_{24} \text{ O}_3$$

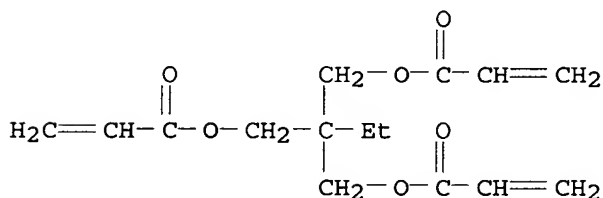
CCI IDS, PMS

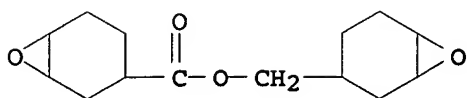


CM 2

CRN 15625-89-5

CMF C15 H20 O6

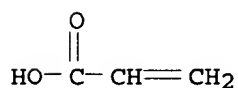




CM 4

CRN 79-10-7

CMF C3 H4 O2



RN 135936-45-7 HCAPLUS

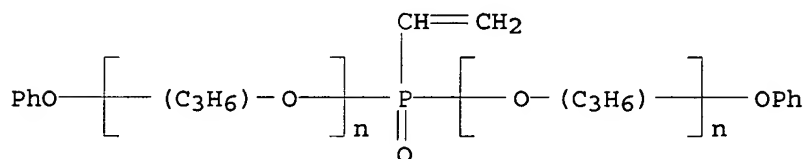
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with α, α' -(ethenylphosphinylidene)bis[ω -phenoxy poly[oxy(1,2-ethanediyl)]] , 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 134366-93-1

CMF (C3 H6 O)_n (C3 H6 O)_n C14 H13 O3 P

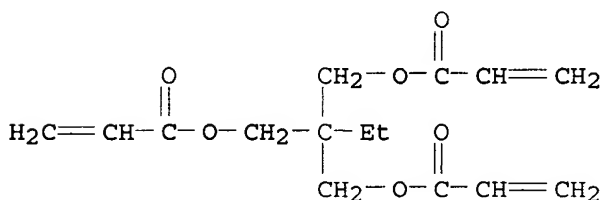
CCI IDS, PMS



CM 2

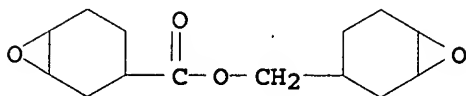
CRN 15625-89-5

CMF C15 H20 O6



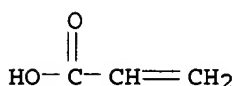
CM 3

CRN 2386-87-0
CMF C14 H20 O4



CM 4

CRN 79-10-7
CMF C3 H4 O2



L39 ANSWER 57 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1990:120750 HCAPLUS

DN 112:120750

TI Liquid, radiation-hardenable resins for primers for optical conductors

IN Birkle, Siegfried; Feucht, Hans Dieter; Kamps, Rainer; Rissel, Eva Maria

PA Siemens A.-G., Fed. Rep. Ger.

SO Ger. Offen., 6 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3743990	A1	19890713	DE 1987-3743990	19871223
PRAI	DE 1987-3743990		19871223		

AB Liquid, irradiation-hardenable resins for primers on optical conductors, e.g., optical fibers, having secondary coatings of epoxy- or urethane acrylates are manufactured by reaction of (meth)acrylic acid or acid anhydride or isocyanatoalkyl (meth)acrylate with 1:2 adducts of aliphatic and (or) aromatic diglycidyl ethers, (cyclo)aliphatic diepoxides, or Si-containing organic

diepoxides with α , ω -dihydroxypolyoxyalkalines, α , ω -dihydroxypolyesters, α , ω -dihydroxybutadiene, or α , ω -dihydroxypolysiloxanes with mol. weight 1000-5000. Thus, reaction of 300 g ethylene oxide-THF copolymer diol (mol. weight 2000) with 25.5 g bisphenol A diglycidyl ether at 60° in CHCl₃ containing CF₃SO₃H catalysts gave a liquid adduct with OH value 0.1 mols/100 g, which was reacted (100 g) with 15.5 g isocyanatoethyl methacrylate at between room temperature and 30° in CHCl₃ containing dibutyltin dilaurate catalysts to give 110 g clear, white yellow resin with viscosity 11,000 mPas. A 500- μ m layer of this resin was exposed to 25 kGy 1 MeV electron beam under N to give a clear, white, rubbery film with glass temperature -40°.

IC ICM C08G059-16

ICS G02B006-44

ICA C08G059-17

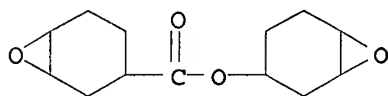
CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 37, 57

IT 125690-53-1P 125690-54-2P 125690-55-3P 125690-56-4P
 125690-57-5P 125690-58-6P 125717-14-8P 127037-54-1P
 RL: PREP (Preparation)
 (manufacture of radiation-hardenable, for primers for optical fibers)
 IT 125690-55-3P
 RL: PREP (Preparation)
 (manufacture of radiation-hardenable, for primers for optical fibers)
 RN 125690-55-3 HCAPLUS
 CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-yl
 ester, polymer with 2-isocyanatoethyl 2-methyl-2-propenoate and
 tetrahydrofuran (9CI) (CA INDEX NAME)

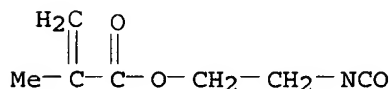
CM 1

CRN 37757-92-9
 CMF C13 H18 O4



CM 2

CRN 30674-80-7
 CMF C7 H9 N O3



CM 3

CRN 109-99-9
 CMF C4 H8 O



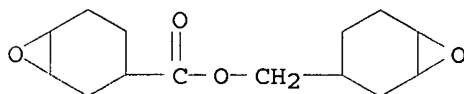
L39 ANSWER 58 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1988:6664 HCAPLUS
 DN 108:6664
 TI Polyamides
 IN Oba, Masayuki
 PA Toshiba Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62074932	A2	19870406	JP 1985-214612	19850930
PRAI	JP 1985-214612		19850930		
AB	Heat-resistant and storage-stable polyamides, inherent viscosity 0.2-2.0 in N-methylpyrrolidone at 30° (0.5% solution), are prepared by the reaction of tetracarboxylic acid dianhydrides with diamines in an organic solvent, followed by the reaction of the resulting polyamic acids with epoxy resin acrylates. The polyamides alone or in mixts. with photosensitizers and photocatalysts are useful in semiconductor devices. Thus, treating 5.005 parts 4,4'-diaminodiphenyl ether with 5.453 parts pyromellitic anhydride in AcNMe ₂ at 10° gave a polyamic acid, which was stirred with 8.109 parts Celloxide 2021-acrylic acid (290:80) reaction product at 50° in the presence of choline chloride to give a polyamide with inherent viscosity 0.87.				
IC	ICM C08G069-48				
CC	35-5 (Chemistry of Synthetic High Polymers) Section cross-reference(s): 76				
ST	polyamic acid epoxy acrylate polyamide; heat resistance polyamide semiconductor device; storage stable polyamide semiconductor device; aminophenyl ether pyromellitic anhydride polyamide				
IT	111966-11-1P 111966-12-2P 111966-13-3P 111966-14-4P 111966-15-5P 111966-16-6P 111966-19-9P RL: PREP (Preparation) (heat-resistant, storage-stable, manufacture of)				
IT	111966-11-1P 111966-12-2P 111966-13-3P 111966-14-4P RL: PREP (Preparation) (heat-resistant, storage-stable, manufacture of)				
RN	111966-11-1 HCAPLUS				
CN	7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, 4,4'-oxybis[benzenamine] and 2-propenoic acid (9CI) (CA INDEX NAME)				

CM 1

CRN 2386-87-0

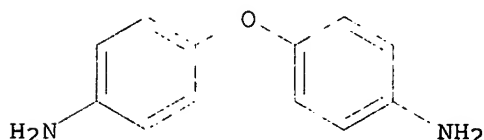
CMF C14 H20 O4



CM 2

CRN 101-80-4

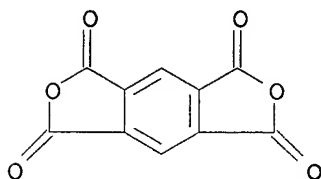
CMF C12 H12 N2 O



CM 3

CRN 89-32-7

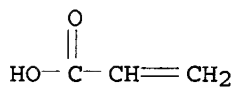
CMF C10 H2 O6



CM 4

CRN 79-10-7

CMF C3 H4 O2



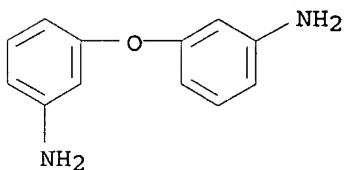
RN 111966-12-2 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, 3,3'-oxybis[benzenamine] and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15268-07-2

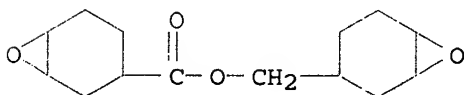
CMF C12 H12 N2 O



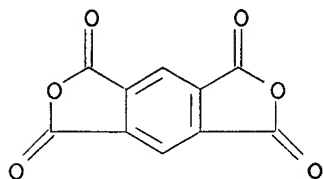
CM 2

CRN 2386-87-0

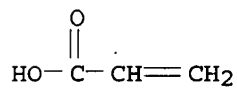
CMF C14 H20 O4



CM 3

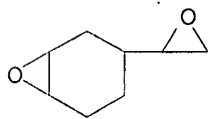
CRN 89-32-7
CMF C10 H2 O6

CM 4

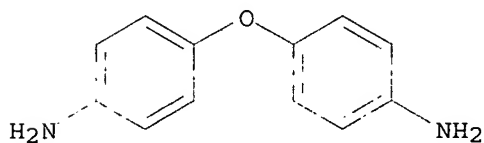
CRN 79-10-7
CMF C3 H4 O2

RN 111966-13-3 HCAPLUS
CN 2-Propenoic acid, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, 3-oxiranyl-7-oxabicyclo[4.1.0]heptane and 4,4'-oxybis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 106-87-6
CMF C8 H12 O2

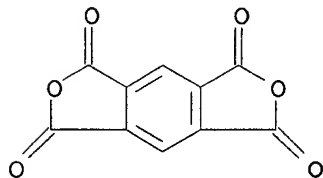
CM 2

CRN 101-80-4
CMF C12 H12 N2 O

CM 3

CRN 89-32-7

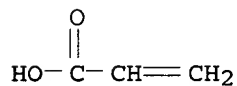
CMF C10 H2 O6



CM 4

CRN 79-10-7

CMF C3 H4 O2



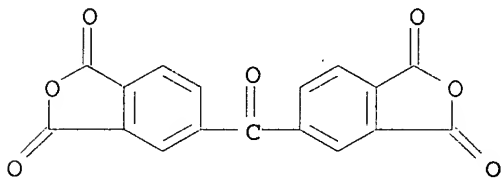
RN 111966-14-4 HCAPLUS

CN 2-Propenoic acid, polymer with 5,5'-carbonylbis[1,3-isobenzofurandione],
3-oxiranyl-7-oxabicyclo[4.1.0]heptane and 4,4'-oxybis[benzenamine] (9CI)
(CA INDEX NAME)

CM 1

CRN 2421-28-5

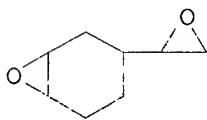
CMF C17 H6 O7



CM 2

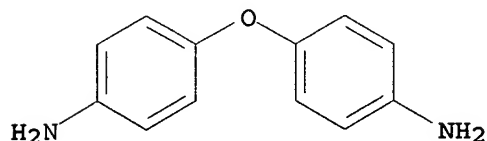
CRN 106-87-6

CMF C8 H12 O2



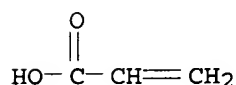
CM 3

CRN 101-80-4
CMF C12 H12 N2 O



CM 4

CRN 79-10-7
CMF C3 H4 O2



L39 ANSWER 59 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1987:498284 HCAPLUS

DN 107:98284

TI Soluble acrylate copolymers from monomers containing at least 2 unsaturated carbon-carbon double bonds for coatings

IN Jung, Werner; Sievers, Axel

PA BASF Lacke und Farben A.-G., Fed. Rep. Ger.

SO Ger. Offen., 14 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3534858	A1	19870402	DE 1985-3534858	19850930
	WO 8702041	A1	19870409	WO 1986-EP488	19860820
	W: AU, BR, DK, JP, NO, US				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	AU 8662857	A1	19870424	AU 1986-62857	19860820
	AU 604647	B2	19910103		
	JP 63501508	T2	19880609	JP 1986-504628	19860820
	JP 07033411	B4	19950412		
	EP 275255	A1	19880727	EP 1986-905271	19860820
	EP 275255	B1	19901227		
	R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
	BR 8607192	A	19880913	BR 1986-7192	19860820
	AT 59394	E	19910115	AT 1986-905271	19860820
	ZA 8606755	A	19870527	ZA 1986-6755	19860905
	CA 1298431	A1	19920331	CA 1986-519320	19860929
	ES 2002387	A6	19880801	ES 1986-2306	19860930
	DK 8702764	A	19870529	DK 1987-2764	19870529
	NO 8702278	A	19870714	NO 1987-2278	19870529
	NO 168252	B	19911021		
	NO 168252	C	19920129		
	US 4839448	A	19890613	US 1987-60243	19870529

US 4883838	A	19891128	US 1989-318114	19890302
CA 1312985	A2	19930119	CA 1991-616034	19910328
PRAI DE 1985-3534858	A	19850930		
EP 1986-905271	A	19860820		
WO 1986-EP488	A	19860820		
CA 1986-519320	A3	19860929		
US 1987-60243	A	19870529		

AB Soluble acrylate copolymers with acid number 30-120 are manufactured from compns.

containing 3-30% monomers with ≥ 2 olefinic double bonds and are used with epoxide crosslinkers to prepare chemical resistant, glossy, water-resistant, elastic, anticorrosive coatings. Thus, polymerization of styrene 160, hexanediol dimethacrylate 160, β -carboxyethyl acrylate 80, Bu acrylate 120, tert-Bu acrylate 100, and 4-vinylpyridine 80 parts in the presence of AIBN in organic solvents gave a 50.7% solids copolymer (I, acid number 60) solns. with viscosity 6.1 dPa.s. A TiO₂-pigmented, 40- μ m coating prepared from I and bisphenol A epoxy resin (epoxy equivalent weight

190)

on glass plate exhibited complete resistance to a 5-min immersion in gasoline or xylene after drying 6 days at room temperature or 30 min at 60°.

IC ICM C08F220-00
ICS C08F002-38; C08F220-20; C08F226-00; C08F230-02; C09D003-80;
C09D003-58

CC 42-7 (Coatings, Inks, and Related Products)
Section cross-reference(s): 35

IT 504-24-5DP, 4-Aminopyridine, reaction products with maleic anhydride copolymers 110084-36-1DP, reaction products with 4-aminopyridine 110098-90-3P 110120-76-8P 110120-77-9P 110120-78-0P

RL: PREP (Preparation)

(manufacture of soluble, for epoxide-crosslinkable chemical resistant coatings)

IT 110084-37-2P 110084-39-4P

RL: PREP (Preparation)

(manufacture of, as chemical resistant coatings)

IT 110084-39-4P

RL: PREP (Preparation)

(manufacture of, as chemical resistant coatings)

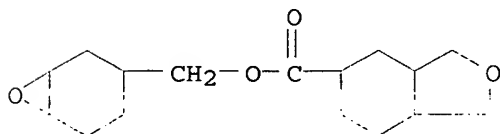
RN 110084-39-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester, polymer with butyl 2-propenoate, 2-carboxyethyl 2-propenoate, 1,1-dimethylethyl 2-propenoate, ethenylbenzene, 4-ethenylpyridine and 7-oxabicyclo[4.1.0]hept-3-ylmethyl octahydro-5-isobenzofurancarboxylate (9CI) (CA INDEX NAME)

CM 1

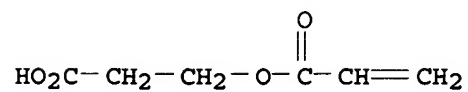
CRN 110084-38-3

CMF C16 H24 O4



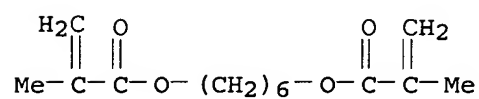
CM 2

CRN 24615-84-7
CMF C6 H8 O4



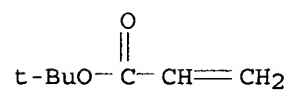
CM 3

CRN 6606-59-3
CMF C14 H22 O4



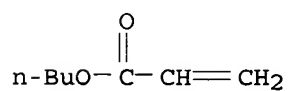
CM 4

CRN 1663-39-4
CMF C7 H12 O2



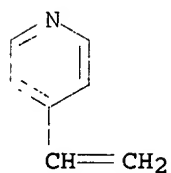
CM 5

CRN 141-32-2
CMF C7 H12 O2



CM 6

CRN 100-43-6
CMF C7 H7 N



CM 7

CRN 100-42-5

CMF C8 H8

$\text{H}_2\text{C}=\text{CH}-\text{Ph}$

=>